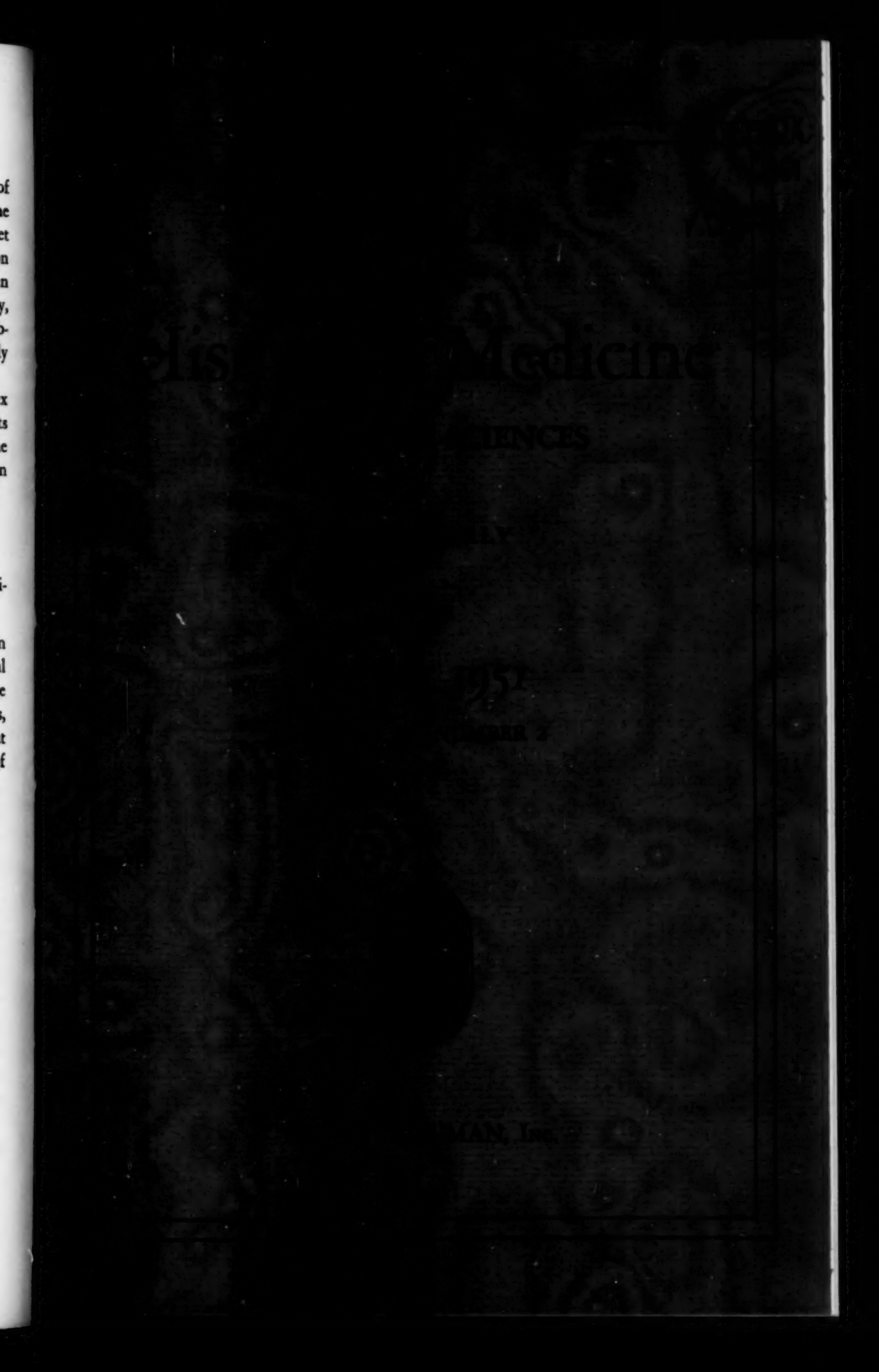

John Quincy, M.D. [d.1722], Apothecary and Iatrophysical Writer:

A Study of his Works, Including his Commentary on Santorio, his *Compleat English Dispensatory,* and his *Lexicon Physico-medicum**

N. Howard-Jones†

JOHN QUINCY is a figure who has not attracted the attention of medical historians, although the esteem in which he was held by some of his contemporaries and the influence of his writings were considerable. While his name is not associated with any scientific discovery, nor with any new doctrine, there are several reasons for regarding him as of some interest. At a time when differences between apothecaries and physicians were acute, Quincy, an apothecary, managed to secure widespread acceptance as a writer on medical subjects. His *Dispensatory* was a more complete, a more judicious, and in every way a better work than the several rival compilations by English writers. It long outlived its author and its competitors, and became the basis of later dispensatories and, through them, of two of the most considerable works on the materia medica published in Britain during the first half of the nineteenth century.

Quincy's *Dispensatory* had, therefore, an exceptionally long and distinguished history. Moreover, in common with other similar compilations, it is interesting as a source of information on the practical medicine of its time. There is a natural tendency to think of medical history in terms of a series of illuminating discoveries, or of the immortal published works in which they came to fruition. None of Quincy's works has any claim to remembrance in this sense, but two of them—his *Dispensatory,* and his *Lexicon physico-medicum,* which also survived for many years and in many editions—were popular handbooks for the general practitioner of his day. Many of them must have had in their shops, surgeries, or consulting rooms a copy of the *Dispensatory,* and must have referred, at the end of the volume, to the "*Index* of *Diseases,* and *Remedies* appropriated thereunto," seeking aid in deciding how to treat an obstinate case of Gonorrhoea or Gout; Gravel or Green Sickness; Gripes, dry; or Gums, foul. Here,

* This study was completed in the summer of 1947, but for various reasons of personal convenience was not submitted for publication until May 1950. N. H-J.

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then, is medicine as it impinged upon the patient towards the end of the second decade of the eighteenth century, and, as we follow the successive editions of the *Dispensatory* and of its direct descendants, we see a continuous process of rejection and assimilation which mirrors the development of general medical practice over a period of nearly a century and a half.

Among Quincy's other publications were his translations of Santorio's *Medicina statica* and of Nathaniel Hodges' *Loimologia.* In the second of these translations, Quincy was merely exploiting a topical situation, but the first was a subject after his own heart. In their more speculative passages, Quincy's writings provide a synthesis of the iatrophysical theories of his contemporaries and predecessors, and he makes frequent reference to the views of Borelli, Bellini, Baglivi, Pitcairne, Freind, and Mead. Quincy, like others before and after him, sought refuge in the seeming certainties of mechanical science from the confusion, empiricism, and quackery of medicine, and tried to relieve medical chaos and obscurity by superimposing mechanical explanations upon phenomena which seemed otherwise inexplicable. His highest praise for the writings of others is that they are "mechanical and demonstrative." His worst reproach, that they are "immechanical and irrational."

Quincy's own writings contain many indications of his character and personality. The impression that emerges is of a fundamentally honest man, repelled and bewildered by the lack of science and order in medical doctrine, contemptuous of fraud and charlatanism, and earnestly striving to arrive at an interpretation of vital phenomena in terms that could be acceptable to his reason. This impression is largely confirmed by his friend and admirer, Dr. Peter Shaw.[1] Of Quincy, Shaw says:[2]

> There was no one quality seemed to reign in Dr. Quincy than that of public-spiritedness, or a thirst after the good of mankind. This principle directed him to turn his studies to the improvement of medicine, which he lamented to see so miserably corrupted and wretchedly understood by those who claimed it as their province.

Shaw delicately avoids a direct statement that Quincy was an apothecary, saying only that ". . . this gentleman's manner of education gave him an early insight into the defects, the frauds, and abuses of the several professions which are now jointly concerned in carrying on this art."

After he had become an apothecary, Quincy "vigorously applied him-

[1] Dr. Peter Shaw (1694–1763) was in 1752 appointed Physician Extraordinary to George II, and later to George III. In 1723 he arranged the posthumous publication of Quincy's *Prælectiones pharmaceuticæ,* to which he contributed a preface of 15 pages. In the article on Shaw in the *DNB,* he is given as the author of this work.

[2] XI, viii. (The Roman numbers in the footnotes refer to items listed in the bibliography.)

self to the study of mechanics and the *Newtonian* philosophy; which with a good natural genius, a sufficient stock of learning, and a frank and honest heart, excellently fitted him for that great work he earnestly set about. A person of these extraordinary qualifications, joined to a strong detestation of sordid ends and private views, could not well fail of success." Of Quincy's "several physical treatises," Shaw says[3] that "the universal acceptance that they met with, is a sufficient demonstration of their usefulness, and his own merit."

Shaw singles out for special mention Quincy's edition of Santorio, and his *Dispensatory*. Of the former, he says: "The Doctor has therein shewn how successfully mechanical reasoning may be applied, to bring certainty into medicine: A thing that was greatly wanted." Of the latter, ". . . he ingenuously [*sic*] discovers the mystery of pharmacy, and exposes the pernicious tricks and abuses to which it is liable: Here a true and solid foundation of the art is laid, a just notion of it inculcated, and to say no more, it is to this work that we are chiefly obliged for the meliorated state of pharmacy we at present enjoy."

Further biographical information on Quincy is lacking. The probable date of his death is fixed by his writings at 1722, and that year is given by Sir Norman Moore in his article on Quincy in the *Dictionary of national biography*. The source of this information is not stated, and other dates in the same article are definitely incorrect. The year 1722 is therefore accepted in the present paper, but with some reserve.

Quincy's Edition of Santorio's *Medicina Statica*

Quincy's first printed work, published in 1712, was a translation, with ample commentaries, of Santorio's *Medicina statica*. It is remarkable that an edition of this translation, including Quincy's commentaries, was published as late as 1842.[4] As a result of this work, the University of Edinburgh "conceived such an opinion of his abilities, that they voluntarily conferred upon him the degree of Doctor in physic."[5] In his preface, Quincy makes it clear that his attitude to Santorio is not one of uncritical acceptance:

"He lays down his matters of Fact upon such Evidences as cannot deceive; but when sometimes he goes farther, and gives Reasons, why it is so, he is hardly to be understood."[6] Quincy also shows his independence

[3] XI, ix.

[4] *Medicina statica, being the aphorisms of Sanctorius translated into English with large explanations by J. Quincy and further explanations by J. K. Stuart.* Glasgow, 1842. Item 1079 in Catalogue 73 of David Low (Booksellers) Ltd., 17 Cecil Court, London, W.C.2. The author was able to examine this copy, thanks to the courtesy of Mr. Low.

[5] XI, ix.

[6] I, iv.

of judgment in his reference to Authority, which, he says, "with some persons may have considerable weight, altho' with myself I confess it has but little."[7] Anticipating criticism of his contentions, he says of "mechanical reasoning" that "the greatest number of Professors in Medicine are declared Enemies to it, and make nothing of breaking their jests upon Angles, Cylinders, Cones, Celerity, Percussion, Resistance, and such like Terms, which they say have no more to do with Physick or a human body, than a Carpenter has to do in making Venice Treacle, or curing a Fever."

Quincy concludes his preface with the plea that the reader should not "flight the Performance, because the Author is not so happy to have any other distinction than that of an Apothecary, A Name which has the Misfortune to sound but indifferently with those who very much value themselves upon Academical Advantages."[8] If he has invaded the province of the Faculty, he adds, he has done nothing that lies "out of the reach of any common Capacity, assisted only with such helps as an inquisitive Mind and frequent Opportunities of Observation are able to supply . . . It must surely then be very hard that an Apothecary only, whose proper business leads him a great way into these Affairs, must be tied down to perpetual Ignorance."

He was, however, disappointed in his expectation that his frankness would assure him of an unprejudiced hearing, for in 1714 he complains.

> The BOOKSELLER has informed me of an Error I was guilty of in the PREFACE to my Explanations of MEDICINA STATICA, in betraying my self to be an Apothecary. I cannot pass this opportunity of extenuating so grievous a Fault, though I must own my Inadvertence, in expecting that a naked Name might make a Book go as well, as one with a Retinue of Capital Letters; and that tolerable Sense might make its Way without TITLE PAGE DECORATIONS, or the SANCTION of a DEGREE. Had I been aware of such Prejudices, I would have concealed my Misfortune in that Respect; but as I am now embarked, I cannot pretend to put my self off with a more considerable Character.[9]

Quincy here shows considerable restraint in forbearing to mention that the Edinburgh M.D. had been conferred upon him two years before, in 1712.[10]

He did not publish a second edition of his *Medicina statica* until 1720, and in this edition his name appears on the title-page as "John Quincy, M.D." In the preface he makes only an oblique reference to the profession which snobbery and prejudice had made it more profitable to conceal:

> I have a great while laboured under a heavy Complaint of the Bookseller for the Confession of somewhat to my disadvantage in the Close of the *Preface*, to the last

[7] I, vii.
[8] I, ix.
[9] II, ii–iii.
[10] The writer is indebted to Dr. Douglas Guthrie of Edinburgh for the information that it was in the year 1712 that Quincy received the degree of M.D.

Edition, which he tells me has been a Prejudice to his Profits: I shall therefore for his sake be so careful not to disgrace my self at this Time, even in my Apology to him, as not to mention what that Fault was.[11]

The first edition contains four essays which are interpolated in relevant positions in the text as Digressions. In the second edition, three of these have been collected together and printed, with four additional essays, as a supplement under the general title *Medico-physical essays.* Also included in the second edition is Quincy's translation of the *Medicina statica britannica*[12] of Dr. James Keill [1673–1719]. In this work, which was dedicated to Dr. John Freind, Keill, a physician of Northampton, describes balance experiments similar to those performed by Santorio, and Quincy includes a translation[13] of the work because, as he says,[14] "the climate and way of living" of Italy and England are "so very different."

In both editions, Quincy includes a 42-page introductory essay, *Of mechanical knowledge, and the grounds of certainty in physick.* In this essay he hopes to demonstrate "that those Rules and Laws of Motion, which we are furnished with from *Mechanicks,* are the only Guides we can have in discovering the Natures and Properties of all material Substances whatsoever. . . ." Developing this theme, he gives as examples three different propositions: (i) That Julius Caesar was stabbed by Brutus etc.; (ii) That there is an eternal difference between good and evil; (iii) That the three angles of any triangle are equal to two right-angles—and considers the differing rules of evidence employed in judging of their truth or falsity. The geometrical demonstration of the truth of the third proposition is discussed in some detail, and Quincy proceeds to a long disquisition on the properties of matter which, as he insists, must equally be applicable to the material substance of which the human body is composed.

For not withstanding the Excellence of its Composure, and the wonderful Variety and Fineness of its Parts, upon which so many extol it and seem to raise it to a strange Preheminence above the rest of Creation . . . [it must be studied as if it were] no better than any other part of the material World of much viler Account.[15]

Quincy also ridicules the animistic obscurities of some of his contemporaries:

It has something in it that would move ones Laughter as well as Amazement, to

[11] I, viii, 2d edition.

[12] In 1708 Keill published *An account of animal secretion. . . .* A 2d and revised edition was published in 1717 with the title *Essays on several parts of the animal oeconomy. . . .* In 1718 Keill published a 3d edition in Latin, adding for the first time a supplement entitled *Medicina statica britannica.*

[13] Quincy's translation of *Medicina statica britannica* was later included in the 4th (the 3d in English) edition of Keill's *Essays,* which was published, 19 years after the author's death, in 1738. The anonymous editor refers (p. vii) to Quincy as "that hasty writer," but he is able to point to only an occasional minor slip in his translation.

[14] I, vi, 2d edition.

[15] I, xlii.

reflect upon the Extravagancies of some subtile crafty Heads, who, to account for the Operations of a human Body, have abstracted and spiritualized upon it . . . so far as to assign every particular Part some sort of Intelligence or Soul, which rules and manages it in the Performance of its Offices. This wonderful Contrivance indeed not only shews abundance of Penetration in the Authors of it, but also saves a great deal of Trouble in the manner of its Attainment; for by this we come at once to know that the *Stomach* digests, that the *Liver* sanguifies, and that the *Brain* makes Spirits, because these Parts have such Faculties presiding over them. . . . So that every Medicine given to rectify the Disorders of any particular Part, seems only to be a kind of sacrifice to the presiding Deity of that Part.[16]

Quincy then points out that "that extraordinary Chymist *Van Helmont*" has carried this idea to a logical conclusion by setting "one general Deity over the whole, which he calls the *Archaeus;* and by this he has not only shewed a commendable Zeal against Pollytheism, and thrown out of the human Body all those *Pagan* Deities . . . but has also laid open a still much nearer way to the Art of Healing; if any one could be so happy to find out that particular Oblation, which his *Archaeus* would vouchsafe to accept."[17] It is as a sort of blunderbuss therapy aimed at the Archaeus, asserts Quincy, that dispensatories "are stuffed with *Pollychreston's, Panpharmacon's,* and *Panacaea's.* . . ."

Returning from the discussion of "these abstruse Speculations," Quincy again insists that "A human Body . . . so far as it is a Composition of the same Matter with that of all other corporeal Beings, its Structure and Operations cannot be enquired into and accounted for, but upon the same Method of Procedure as we are under a Necessity of using with all other Portions of Matter."[18] Quincy is here advancing a conception of the accessibility of vital functions to scientific investigation and explanation that was not universally accepted by physiologists until well into the nineteenth century.

Thoroughly modern in spirit, also, is Quincy's emphasis upon physical measures as an alternative to drug therapeutics. "A Person . . . will often find a much nearer way to the Seat of the Distemper, than by the Stomach and Guts, and be able to do much more by *Exercise, Bathing,* and the *Flesh-Brush* . . . than by long Courses of the most celebrated *Alteratives* or *Sweeteners.*"[19] This emphasis upon physical exercise recurs again in Quincy's comments on Santorio's Aphorism LXXIV, Sect. I, and Aphorism XXXIV, Sect. IV, both of which are concerned with the alleged effects of yawning and stretching on insensible perspiration. "I cannot easily pass by here, the vast Advantages of some little exercises just after waking

[16] I, xliii.
[17] I, xliv.
[18] I, xliv–xlv.
[19] I, xlix.

in the morning."[20] Again, ". . . I cannot but be persuaded, that to leap suddenly out of Bed in the Morning, and before putting on any Garments, to leap and throw about the Arms with Weights in each Hand, until almost out of Breath, wou'd be as likely an Exercise to keep the Body in a sound and perfect Health . . . as any one thing besides."[21]

Another of Quincy's contentions—that of the influence of the mind on illness—is wholly in conformity with modern ideas.

> But there is something farther, besides Physical Agents, which has to do in a human Body, and which by certain Experience is able to bring about strange Changes therein, and that is the Mind, or Soul, or Power of Thought, whatsoever it is called. Nothing is more obvious than the Disorders which have no other manifest Cause than in the Passions of the Mind, and likewise how far the Dispositions and Affections of That will go in the removal of a great many ill Habits.[22]

Of "the manner how the Mind or Thought works upon the Body," Quincy says that it is a mystery which cannot "be brought under a mechanical Way of Reasoning; because it is not possible to represent and delineate as we do corporeal Substances, that which never comes under the Notice of our Senses, but in its Effects."[23] Nevertheless, he leaves no doubt as to the reality of the reciprocal relationship: "What that *Nexus* or Bond of Union is between the Mind and the animal Fluids, God Almighty only knows; but there is not any one thing better confirmed by Experience, than that they mutually influence one another."[24]

Quincy refutes[25] Santorio's contention that "Ticks, Lice and the like" are generated from coalescence of "the heavier part" of the perspiration, pointing out that they cannot be produced "from this matter without Animal Parents." He denies[26] also that pork and mushrooms are to be avoided as articles of diet, adding that "they make very agreeable and wholesome Food."

Quincy's comments—or Explanations, as he calls them—to Santorio's aphorisms show him to be a well-read and discriminating critic. The numerous references to writers of the seventeenth and early eighteenth centuries, together with Quincy's readiness to define his terms and his intellectual honesty in admitting his inability to follow some notions, make these comments of value in the attempt to understand iatrophysical theories of the time. His candour is illustrated by his brief comment[27] on an obscure aphorism (xxix; Sect. VII): "This lies entirely beyond the reach of my Understanding." He is also unable to swallow some of Santorio's conten-

[20] I, 42.
[21] I, 176.
[22] I, l–li.
[23] I, 229.
[24] I, 270.
[25] I, 43.
[26] I, 127.
[27] I, 288.

tions (Aphorisms xlvii, xlviii; Sect. IV) about the effects of sleep and waking on the animal, vital, and natural spirits:

"I must confess my self not Master enough of Penetration, to enter into . . . these *Aphorisms,* notwithstanding I am sensible that much hath been said by a great many others as well as *Sanctorious,* concerning this Distinction of the Spirits into *animal, vital,* and *natural;* yet such is my unhappiness, that I never yet could understand half the fine Things that have been advanced hereupon."[28] He is able, he says, to "form some *Idea* of a very thin volatile Matter" arising from the motion of the blood and dispensed throughout the body, but he is at a loss to know how various kinds of spirits can be distinguished, or "how the *Ballance* [as used by Santorio] comes to make any Discovery" about them.

In a later passage[29] he reverts to this problem and describes the differentiation of the spirits as useless and serving only to make the subject "full of Mystery and Obscurity, and to darken Truth with a Multiplicity of unintelligible Terms"—a vice of which even Santorio is guilty "whensoever he leaves Experiment and Matter of Fact, and endeavours to accomodate his Expressions to the School Systems."

Quincy, although no killjoy, shows himself to be a resolute believer in moderate living. He takes strong exception to the belief, common at the time, that an excess of eating and drinking once or twice a month was good for health: "whosoever pretends to debauch, although but twice a Month for Healths sake, it is to be feared will find a time for Repentance."[30] On Santorio's advocacy (Aph. XXXIII; Sect. V) of "moderate dancing, without jumping," he comments that "this may perhaps help to reconcile some scrupulous Persons to this Exercise."[31] He disagrees, however, with Santorio's assertion (Aph. VI; Sect. VI) that "immoderate coition with a Woman, whom a Person hath been very desirous before to enjoy" is not followed by fatigue. In fact, says Quincy, the temporary elation following such a triumph will give place to "the same, if not worse Effects of his Raptures, than is common to a more indifferent Lover."[32]

In spite of the general shrewdness of his observations, it is only to be expected that Quincy should give currency to some of the gross physiological errors of his time. Thus he believes that the dura mater acts as a pump, transmitting pulsations to the *Succus nervosus* and thus bringing about a "*Tonick* Motion of the whole nervous System."[33]

[28] I, 196.
[29] I, 255.
[30] I, 159.
[31] I, 238.
[32] I, 243.
[33] I, 151.

Medico-Physical Essays

The subjects of the *Medico-physical essays* inserted as a supplement to the second edition (1720) of Quincy's *Medicina statica* are: (i) agues; (ii) fevers; (iii) the elasticity of an animal fibre; (iv) gout; (v) leprosy; (vi) the Kings Evil; (vii) venereal diseases. In the third of these essays, Quincy starts by pointing out that he has already proved in his introduction that "a human Body as it comes under the Notices of a Physician, is merely a Machine, and that whosoever goes any other Way to enquire into its Constitution . . . abuses his Faculties."[34]

In this essay, he develops[35] a theory of muscular contractility, taking as his model a syringe with an occluded extremity, the piston of which can be withdrawn only by the exercise of considerable force. When the piston is released, it springs back into its former position. Quincy supposes muscular fibres to be composed of a number of smaller units, or *Machinulae.* Any pair of adjacent machinulae will be enveloped by other machinulae which prevent the entry of air or fluid. When the machinulae have been drawn apart by an external Force "greater than that of their Cohesion," they will recoil and make contact again as soon as that force is removed.

In his essay on gout, Quincy asserts that the disease is attributable to "a Redundance of rigid Particles in the extream parts, that gathers chiefly upon the Glands of the Joints, and occasions very sharp Pains."[36] He defines "rigid Particles" as "such as approach near to Saline, of the Nature of Tartar, and not much unlike that which forms itself into Concretions in the urinary Passages." He maintains that an attack of gout represents an attempt by the body to rid itself of "this sandy, gritty saline Matter" which it has not been able to dispose of otherwise. He therefore regards gout as a "critical solution of much worse Distempers," and warns against those who "pretend to prevent, or cure it," adding: "What must we then think of the Tribe of Empiricks, who are continually stuffing the daily Papers with Advertisements and Pretentions of Cure in this Case, but that they are a drove of Robbers and Murtherers, without the reach of the Law."[37] He does not hesitate, however, to recommend a number of palliatives, especially *Camphire,* which has the "strange property . . . in blunting the Edges and Pains of rigid Particles."[38] In his essay on the King's Evil, Quincy describes the treatment by "touching" as "so remote from all good Sense since it can take place only on a deluded Imagination, that

[34] VII, 30.
[35] VII, 33–38.
[36] VII, 63.
[37] VII, 84.
[38] VII, 91.

I think it justly banished with the Superstition and Bigotry that introduced it."[39]

CARR'S *Medicinal Epistles*

In 1714, two years after his first edition of Santorio, Quincy published an English translation of Carr's *Epistolae medicinales variis occasionibus conscriptae* (1691), which he describes as "a Supplement to the Explanations of Sanctorious's Aphorisms." The subjects of these epistles include snuff, tobacco, and "Coffee-House Liquors"; "the Use of the Bath in promoting Conception"; "Whether it may be known by the Urine that a Woman is with Child," "Whether it be healthful to be *drunk* once in a Month," and other homely matters. Quincy adds nothing to them but an occasional footnote citing a relevant aphorism of Santorio.

THE *Compleat English Dispensatory*

Quincy's *Dispensatory*—described by Peter Shaw, his contemporary, as "that unparallel'd performance"[40]—was first published in 1718,[41] and the numerous subsequent editions (Fig. 1) are sufficient evidence of its success. A second edition was published in 1719, and a third in 1720. In 1721, Quincy published separately an annotated translation[42] of the London Pharmacopoeia. The notes were simply excerpts from his *Dispensatory,* and were printed between quotation marks after the English texts of the official preparations. The fourth edition of the *Dispensatory* was published in 1722, the year of Quincy's death. Further editions were published, without substantial alteration, and under anonymous editorship, until the twelfth edition in 1742 (Fig. 2).

It is a curious bibliographical anomaly that, seven years later, a second

[39] VII, 107–108.
[40] XI, ix.
[41] Sir Norman Moore in the *DNB* gives the date as 1721.
[42] X.

Fig. 1 (page 159). From Quincy to the British Pharmacopoeia

The chart shows the editions of Quincy's *Dispensatory* and its later derivatives. The first column gives the edition; the second, the editor; the third, the year of publication; the fourth the location in each of several libraries, as follows:

1. Medical Society of London
2. Pharmaceutical Society (London)
3. Royal College of Physicians of London, Catalogue of the Library, 1912
4. Royal College of Physicians of Edinburgh, Catalogue of the Library, 1863
5. Royal College of Surgeons in London, a classed catalogue of . . . the library, 1843
6. Royal Society of Medicine (London)
7. Surgeon-General's Office, Index-catalogue . . . of the library
8. Wellcome Historical Medical Museum (London)
9. In the author's possession

Quincy's COMPLEAT ENGLISH DISPENSATORY

1.	Quincy	1718	2,4,8
2.	Quincy	1719	6,8
3.	Quincy	1720	2,5,8
4.	anon.	1722	2,3,6,7,8
5.	anon.	1724	2,5,6
6.	anon.	1726	2,8
7.	anon.	1728	2,8
8.	anon.	1730	2,5,7,8,9
9.	anon.	1733	2,5,7,8
10.	anon.	1736	2,6,8
11.	anon.	1739	2,3,8
12.	anon.	1742	2,8
12a.	[?Lewis]	1749	2,3,5,7,8
13.	anon.	1761	2,5,7,8
14.	anon.	1769	2,8
15.	anon.	1782	6,8

Lewis's NEW DISPENSATORY... intended as...an improvement of Quincy

1.	[Lewis]	1753	2,3,6,7
2.	[Lewis]	1765	8
3.	[Lewis]	1770	2,7,8
4.	Lewis	1781	2,9
5.	anon.	1785	2,5,8
6.	anon.	1799	2

EDINBURGH NEW DISPENSATORY being an improvement...of Dr.Lewis

1.	[Webster]	1786	6
2.	Duncan sen.	1789	3,4,7,9
3.	Duncan sen.	1791	8
4.	Rotheram	1794	2
5.	Rotheram	1798	2,7,8
6.	Rotheram	1801	1,2

EDINBURGH NEW DISPENSATORY [second series]

1.	Duncan jun.	1803	2,4,7
2.	Duncan jun.	1804	2,8
3.	Duncan jun.	1806	2
4.	Duncan jun.	1808	2,8
5.	Duncan jun.	1810	8
6.	Duncan jun.	1811	2
7.	Duncan jun.	1813	6
8.	Duncan jun.	—	-
9.	Duncan jun.	1819	2,7
10.	Duncan jun.	1822	6
11.	Duncan jun.	1826	1,2,3,5,6
12.	Duncan jun.	1830	3,6,7

Thomson's LONDON DISPENSATORY

1.	Thomson	1811	1,2,6
2.	Thomson	1818	3,6,7,8
3.	Thomson	1822	6,8
4.	Thomson	1826	1,3,5,7,8
5.	Thomson	1830	8
6.	Thomson	1831	7
7.	Thomson	1833	8
8.	Thomson	1836	2,7,8
9.	Thomson	1837	6,8
10.	Thomson	1844	1,6,8
11.	Garrod	1852	2,4,6

Christison's DISPENSATORY

1.	Christison	1842	2,3,4,6,7,8
2.	Christison	1848	1,2,3,4,6,7,8

Christison and Garrod both actively concerned in the editing of the first BRITISH PHARMACOPOEIA (1864)

"twelfth edition" was published in 1749 (Fig. 3). This is not a mere reprint of later date. In fact, the difference between the two "twelfth" editions is greater than that between any other two. In the 1749 edition, the whole of the original first section of the work, "The theory of pharmacy," is for the first time omitted and replaced by a more modern account of pharmaceutical chemistry. Quincy's own preface is retained, but is followed by a new "Preface of the present editor," in which a tribute[43] is paid to Quincy: "It would be needless to attempt to show here the utility of Quincy's *Dispensatory,* or to set forth its particular merit; the great demand for, and universal use of it by practitioners in every branch of medicine, having done that much more effectively than lies within the power of words." The new editor points out, however, that Quincy's theories are now largely obsolete, and that drastic revisions have become essential. Another innovation is the inclusion of the preparations of the Edinburgh Pharmacopoeia. In its modernized form, the *Dispensatory* continued until a fifteenth edition in 1782. With the fourteenth (1769), Quincy's original preface was omitted.

The work did not, however, die without an heir, for in 1753, William Lewis [1714–1781], M.B., F.R.S. had published a revised version of it under the title *The new dispensatory . . . Intended as a correction and improvement of Quincy.* The first three editions of this which appeared during Lewis's lifetime did not bear his name, but the fourth, published in the year of his death, and the subsequent editions, included his name as author on the title-page. The fifth edition, published in 1785, includes also an "Advertisement to the fifth edition" (pp. ix–x) which refers to Lewis as having been responsible for previous editions. A sixth edition was published in 1799.

It is highly probable that Lewis was responsible for the second of the two "twelfth" editions of Quincy's *Dispensatory.* In 1748 he had published an English translation[44] of the Edinburgh Pharmacopoeia, and the revised "twelfth" edition of Quincy in 1749 is a logical intermediate step between the original twelfth edition of Quincy and Lewis's *New dispensatory* of 1753. In 1761, Lewis published his admirable *Experimental history of the materia medica.*

In its turn, Lewis's *New dispensatory* gave rise to a successor—*The Edinburgh new dispensatory . . . being an improvement upon the New*

[43] III, x, "twelfth edition" of 1749.

[44] The pharmacopœia of the Royal College of Physicians at Edinburgh. Faithfully translated from the fourth edition. With useful notes on the materia medica, and practical observations on the preparations, both simple and compound. To which are added the prescriptions, as well extemporaneous as official, in use at the Royal Hospital. By W. Lewis, M.B., F.R.S. London, 1748.

43809

Pharmacopœia Officinalis & Extemporanea.

Or, A COMPLETE

Engliſh Diſpenſatory,

In FOUR PARTS.

CONTAINING

I. The Theory of PHARMACY, and the ſeveral Proceſſes therein.

II. A Deſcription of the OFFICINAL SIMPLES, with their Virtues and Preparations, *Galenical* and *Chymical.*

III. The OFFICINAL COMPOSITIONS, according to the laſt Alterations of the *College:* Together with ſome Others of uncommon Efficacy, taken from the moſt Celebrated Authors.

IV. EXTEMPORANEOUS PRESCRIPTIONS, diſtributed into Claſſes ſuitable to their Intentions in Cure.

To which is added,

An Account of the COMMON ADULTERATIONS both of SIMPLES and COMPOUNDS; with ſome Marks to detect them by.

By *JOHN QUINCY*, M. D.

The Twelfth Edition, enlarged and corrected

LONDON:

Printed for THOMAS LONGMAN, at the *Ship* in *Paternoſter-Row.* M.DCC.XLII.

1742.

Fig. 2. Title-page of the original twelfth edition of Quincy's *Dispensatory*. This edition is not essentially different from the previous eleven.

28654

Pharmacopœia Officinalis & Extemporanea:

Or, A COMPLEAT

English Diſpenſatory,

In TWO PARTS.

THEORETIC and PRACTICAL.

PART I.

In TWO BOOKS.

BOOK I. Of the Definition, Subject, General Intentions, Media, Inſtruments, and Operations of PHARMACY.

BOOK II. Of the Diſtribution into proper Claſſes, General Nature, and Medicinal Virtues, *&c.* of SIMPLES.

PART II.

In FIVE BOOKS.

BOOK I. Of the Preparation of Simples.

BOOK II. Of Saline Preparations.

BOOK III. Of Metalline Preparations.

BOOK IV. Of Officinal Compoſitions; containing all the Preſcriptions of the *London* and *Edinburgh* PHARMACOPOEIAS, according to the laſt Alterations thereof; together with thoſe of other Authors, and the preſent Practice, which claim any Notice.

BOOK V. Of Extemporaneous Preſcriptions; which are therein diſpoſed into proper Claſſes according to their ſeveral Curative Intentions.

By *JOHN QUINCY*, M. D.

The TWELFTH EDITION, much Enlarged and Corrected.

LONDON:

Printed for T. LONGMAN, at the *Ship* in *Pater-noſter-Row.*

MDCCXLIX.

Fig. 3. Title-page of the anomalous "twelfth" edition of 1749. This is virtually a different book. It was probably the work of William Lewis, M.B., F.R.S., who in 1753 anonymously published a new work—the *New dispensatory*—which was described on the title-page as "an improvement of Quincy." Quincy's name was omitted from later editions. Quincy's *Dispensatory* maintained concurrently an independent existence until the fifteenth edition in 1782 (see Fig. 1).

Dispensatory of Dr. Lewis. This was published in 1786 under the editorship of Dr. C. Webster[45] of Edinburgh. The second edition of this work appeared in 1789, with Andrew Duncan senior as editor.[46] Duncan senior also edited the third edition (1791), but the remaining three were edited by a Dr. John Rotheram, the sixth and last appearing in 1801.

In 1803, Andrew Duncan junior published the first edition of a second *Edinburgh new dispensatory,* and the production of successive editions of this work became one of the main activities of his professional life. In twenty-eight years, he published twelve editions of the work, the last appearing in 1830. The tenth edition (1822) was published in French (1826) and Italian (1844–47) translations.

The Duncans both pay tribute to their predecessor, William Lewis, Duncan senior asserting[47] that "such was the superiority of Dr. Lewis's Dispensatory . . . over all others extant, that it soon superseded every work of a similar nature in Britain, and obtained a very high reputation abroad," while his son says[48] that the "manner in which the whole was executed, placed Dr. Lewis at the head of the reformers of Chemical Pharmacy." The parent *Edinburgh new dispensatory* also achieved a remarkable success, and "in little more than a year, a very large impression [of the first edition] was completely sold off."[47]

Its offspring, the new work of the same name edited by Duncan junior, was even more successful, and in its turn gave rise to descendants, the first of which was Dr. A. T. Thomson's *The London dispensatory,* of which its author, in the preface to the first edition (London, 1811) frankly admits (p. iii) that "its arrangement and plan coincides very closely with the Edinburgh New Dispensatory . . . the plan of that volume . . . has become so familiar to the profession, and is so well adapted for the purposes of a Dispensatory, that I have thought it prudent not to deviate from it." Thomson's *Dispensatory* went through eleven editions, the last of which appeared in 1852, revised by A. B. Garrod.

The second descendant was Sir Robert Christison's *Dispensatory* which, according to Christison's sons,[49] "was to some extent founded upon the 'Edinburgh New Dispensatory' of his predecessor, Dr. Andrew Dun-

[45] Webster's name does not appear on the title-page, which describes the work as being edited "by Gentlemen of the Faculty of Edinburgh." However, Andrew Duncan junior says in the preface to the 12th (1830) and previous editions of his version of the same work: "It was edited first by Dr. Webster, and afterwards by my Father, and Dr. Rotheram, in succession."

[46] The *Index-catalogue . . . of the Surgeon-General's Office* gives Andrew Duncan *junior* as the editor.

[47] *Edinburgh new dispensatory* [1st series], 2d ed., Edinburgh, 1789, p. vii.

[48] *Edinburgh new dispensatory* [2nd series], 12th ed., Edinburgh, 1830, p. v.

[49] *The life of Sir Robert Christison, Bart.* Edited by his sons. Edinburgh, 1886, vol. 2, p. 176.

can, jun."—a pious underestimate of Christison's indebtedness to the earlier work. Two editions of Christison's *Dispensatory* were published—the first in 1842 and the second in 1848. In 1859, Christison was called upon to supervise the preparation of a national pharmacopoeia, and he delegated the preparatory work to a committee in London, of which the secretary was Prof. A. B. Garrod,[50] who had seven years before been responsible for the last edition of Thomson's *Dispensatory*.

As Comrie[51] points out, Christison's *Dispensatory* "prepared the way for the first Pharmacopoeia of Great Britain and Ireland, issued in 1864 by a Committee . . . of which Christison acted as Chairman." Christison and Garrod, each of whom had published the last editions of the last descendants of Quincy's *Dispensatory,* both had special responsibilities in the preparation of the first British Pharmacopoeia, and it may not in these circumstances seem excessive to regard the latter as having a direct descent, through Christison's and Thomson's *Dispensatories,* from the work originally published by Quincy 146 years before.

A question that may be considered at this point is: How much did Quincy owe to his predecessors, and what was it that distinguished his *Dispensatory* from the many similar British compilations, and determined its long survival in various guises? The first London Pharmacopoeia had been published in 1618—exactly 100 years before Quincy first brought out his *Dispensatory*. In 1649 Nicholas Culpeper published his *Physicall directory,* an individualistically-edited translation of the London Pharmacopoeia. Although Culpeper's work survives even to the present day, its astrological bias has destined it to circulate in the lunatic fringe of medicine, and it cannot be said to have influenced more orthodox works on the materia medica. In 1676[52] William Salmon [1644–1713] published his *New London dispensatory,* which had achieved a seventh edition by 1707 and was immensely popular, and in 1683 he issued a *Doron medicum, or supplement to the London dispensatory.* Quincy, no admirer of Salmon, speaks[53] of the "universal Reception of Salmon's Collections."

The *Pharmacopoeia Bateana,* said to contain the prescriptions of George Bate [1608–1669], M.D., was published in 1688[54] by J. Shipton, and a further edition appeared in 1691. In 1694, the indefatigable Salmon published an English translation of this work, and Salmon's translation had

[50] *Ibid.,* p. 230.

[51] Comrie, J. D. *History of Scottish medicine,* London, 1932, vol. 2, p. 618.

[52] The edition of 1678 bears the appearance of being the first. However, an edition of 1676 is listed in the catalogue of the library of the Royal College of Physicians, and Salmon's original preface, reprinted in later editions, is dated 1676. The edition of 1682 is described on the title-page as the second.

[53] III, vii, 2d edition.

[54] Sir Norman Moore in the *DNB* gives 1690.

reached a 4th edition by 1713. In 1719 another translation of the same work was published by Thomas Fuller [1654–1734], M.D., author of the well-known *Pharmacopoeia extemporanea,* which first appeared in 1702 and had reached a 5th edition by 1714. In 1710, Fuller published an English translation of his own work, and in the preface he is at some pains to justify having made himself intelligible to the vulgar.

In 1693, Samuel Dale's *Pharmacologia*[55] was published, but according to Cullen,[56] Dale was "chiefly a transcriber of Schroeder," whose *Pharmacopoeia medico-chymica* had appeared in 1641.

The best-known English dispensatories before Quincy seem to have been those of Salmon, Bate, and Fuller. Salmon was a self-styled "Professor of Physick," and his writings are justly described[57] by Quincy as being "as bad as they are voluminous." They are the work of a scribbler whose lack of discrimination is rivalled only by his industry. The works of Bate and Fuller were simply collections of prescriptions, and were far less voluminous. None of these writers attempts, as Quincy does, to provide a rationale for the actions of drugs, nor do they show his discrimination. Quincy does not hesitate to include many of the extemporaneous prescriptions from Bate and some from Fuller, but he does his best to eschew "all those Figures and metaphorical Ways of Expression, which the best Writers have too much abounded in," aiming instead at "the utmost Plainness and Perspicuity."[58] As an example of the nonsense committed by other writers, he quotes[59] the following from Fuller:

> This and other fetid Medicines take off Hysteric Fits, by handling the Spirits roughly, and driving and dispersing them. For when they grow mutinous, and unequally dispersed, running in tumultuous Crouds in some places, and leaving others almost ungarison'd; and so either intermit their Duty within the Precincts of the Brain, or *Praecordia,* or else do it perversly; then the best course is to send such a stern Remedy among them, as may use severe Discipline, and lash and scourge them till they are glad to leave their Disorders, and run to their proper Post, and fall to their Charge again.

Reference has been made previously to the commonsense view expressed by Quincy about the animal, vital, and natural spirits.

By his numerous citations of other authors throughout his dispensatory, Quincy shows himself to be well versed in the literature of chemistry and the materia medica, including the works of Continental authorities such as Schroeder, Charas, and Lemery. The first part of his dispensatory

[55] P. O. Wolff claims (*La Semana médica,* 1944, *51,* 814) that this is the first instance of use of the word *pharmacology.* However, he overlooks W. Harris's *Pharmacologia Anti-empirica,* which antedated Dale's *Pharmacologia* by at least 10 years.

[56] Cullen, W. *A treatise of the materia medica,* Edinburgh, 1789, vol. 1, p. 51.

[57] III, vii, 2d edition.

[58] III, x, 2d edition.

[59] III, x–xi, 2d edition.

—"Of the Theory of Pharmacy, and the several Processes therein"—is largely a translation of the *Praelectiones chymicae* of Freind, whom Quincy greatly admired.

Quincy's iatrophysical philosophy has already been fully revealed to us in his edition of Santorio, and it is not to be wondered at that he attempts to explain the operations of pharmacy and the actions of medicines by basing his reasoning on the postulate "That there is an attractive Force in all Bodies whatsoever: or, That all Parts of Matter are mutually drawn towards one another."[60] This reasoning leads him, among other things, to attack the "so darling . . . Notion of *Specifick Remedies.*"

Part II of the work is devoted to the simples, which are classified physiologically, according to their supposed actions. Thus, the first Section contains "Nervous Simples," Class I of which includes "Cardiacs and Cephalics." The Classes are subdivided according to the parts of plants—*Folia, Flores, Semina,* etc. Animal and mineral remedies appear at the end of each Section. To the descriptions of the simples and their uses, are sometimes added directions for detecting counterfeits, and this is characteristic of the practical tone of the work. As an example of the superiority of Quincy over Salmon, their references to the remedial properties of birds' dung may be cited. Whereas Salmon asserts[61] that it "wonderfully Dissolves, Opens, Attenuates, Discusses and eases pain," Quincy describes[62] it as "troublesome and nauseous" and says that it was "at first introduc'd more from Fancy than good Reason." Similarly, Quincy discredits the prescribing of hair, hoof, nails, man's skull—which, he says, "has obtain'd a Place in Medicine, more from a whimsical Philosophy, than any other account"[63]—and mummy. In these views he shows himself to have been much in advance of most of his contemporaries, for most of these animal substances were not expelled from the London Pharmacopoeia until 1746. This makes it very difficult to understand Sir Norman Moore's deprecatory comment on Quincy in the *Dictionary of national biography* that "He considered dried millipedes good for tuberculous lymphatic glands . . . ." This invites the question: Who, in Quincy's time, did *not* believe in the remedial virtues of millipedes? Even the sceptical Cullen[64] in 1789, although casting some doubt upon their value, hesitates to condemn them

[60] III, 1–2, 2d edition. There is a strange similarity between Quincy's words and the opening sentences of his distant successor, A. T. Thomson, author of the *London dispensatory:* "The agents which more generally influence chemical, and, hence, pharmaceutical combinations, are *Attraction* and *Repulsion* . . . Attraction is . . . that power which causes bodies to approach towards each other. . . ." These words were still retained in the last (1852) edition of Thomson's work.

[61] Salmon, W. *New London dispensatory,* 7th ed., London, 1707, pp. 268–269.

[62] III, 93, 2d edition.

[63] III, 92, 2d edition.

[64] Cullen, W. *Op. cit.,* p. 566.

entirely, and they were not in fact dropped from the London Pharmacopeia until 1809—almost a hundred years after Quincy's death.

In Part III, Quincy describes the compositions, classified according to their forms. Most of the prescriptions given are taken from the London Pharmacopoeia or from Bate's dispensatory, but Quincy provides extensive original annotations of a practical character, giving his own opinion on the value of the compositions, describing practical difficulties in their preparation, and discussing the indications for their use. Part IV is devoted to extemporaneous prescriptions which, again, are amply annotated.

Quincy's closing words[65] illustrate that, although he necessarily shared most of the unscientific views of the materia medica which were universal in his time, he nevertheless tends to be always on the side of sanity and moderation.

> But the most general and necessary Rule in all Cases, is to answer the End by as few Medicines as possible, and never to make a Cure worse than the Disease. And such Practice will always procure the best Reputation amongst those whose applause is most valuable, and best support the Dignity of the Profession, and secure the Satisfaction of a good Conscience.

Quincy versus Woodward

In 1718, John Woodward, Professor of Physick at Gresham College, published a pamphlet[66] of 274 pages on *The state of physick and of diseases*. . . . The central idea of this extraordinary and nonsensical work was that "the Beginnings of all Things, good, or bad, to the Body, are in the Stomach" (p. 1). Woodward maintained that, by the action of the gastric juice on ingested food, "a Heat is excited: Fumes and Steams rais'd. These huff up the Stomach: and keep it on a moderate Tension and Inflation" (p. 3). The distended stomach pressed on the descending trunk of the aorta, "which, being rais'd up thither for the purpose, is so placed, on the very Ridge of the Back-Bone, behind the Stomach, as to be subject directly to its Impulse, Action, and Modulation" (p. 3). The alternations of the stomach's pressure on the aorta regulated the amount of blood reaching the brain and other parts of the body,[67] and the degree of dis-

[65] III, 618, 2d edition.

[66] The state of physick and of diseases with an inquiry into the causes of the late increase of them: But more particularly of the small-pox. With some considerations upon the new practice of purgeing in that disease. To the whole is premsied, [*sic*] an idea of the nature and mechanism of man: of the disorders to which it is obnoxious: and of the method of rectifying them. By John Woodward, M.D. professor of physick in *Gresham* College, Fellow of the College of Physicians, and of the Royal Society. London, 1718.

[67] This part of the theory is not new. Mead in his *Mechanical account of poisons* (2d ed., London, 1708, pp. 144–145) ascribes postprandial drowsiness to the effects of pressure of the distended stomach on the abdominal aorta.

tension of the stomach was itself regulated by the "biliose Salts," which Woodward regarded as normal constituents of the gastric juice.

In 1719, Quincy published a 96-page pamphlet—*An examination of Dr. Woodward's state of physick and diseases.* This is quite inappropriately described[68] by Moore in the *DNB* as "scurrilous." Quincy does not hesitate to pour scorn and ridicule on Woodward's pathology, but it hardly merited any other treatment. Further, Woodward himself was a man of a quarrelsome and offensive disposition, and hardly deserving of particular consideration. His *State of physick* is largely an attack upon the views of Freind. He was expelled from the council of the Royal Society for having grossly insulted Sir Hans Sloane at a meeting. And he so provoked the urbane and affable Mead that Mead actually assaulted him.

In his *Examination,* Quincy is able to demonstrate the falsity of Woodward's postulates—for example, that bile is normally found in the stomach[69] and that the aorta lies "on the Ridge of the Back-Bone."[70] On two points in this controversy, however, Quincy is on the wrong side. He denies Woodward's contention that digestion is brought about by the action of the gastric juice, asserting[71] that the stomach's "natural Motion . . . [is] the chief, if not the sole efficient in this Affair." Again, Woodward is rather nearer the truth in attributing the heat of the blood to "the Colluctations and Effervescencies of Salts" than Quincy, who regards it as entirely the product of the blood's motion.

The next step in this controversy was the publication in 1719 of a 28-page pamphlet, *An account of Dr. Quincy's examination of Dr. Woodward's state of physick and diseases.* The only clue to the authorship of this pamphlet is the signature "N. N.," who writes from the Middle Temple. The writer makes no attempt to defend Woodward's contentions on any rational grounds, and confines himself mainly to personalities—asking (p. 6) why Quincy "has not kept to that Profession which best befitted him," referring (pp. 23, 24) to him as "an obscure Fellow," "a Hackney News-writer," and a "Bankrupt Apothecary."

In 1720, Quincy published a 2d edition of his *Examination,* to which he added *A letter to the Doctor, occasion'd by a pamphlet intitled, An account of Dr. Quincy's examination, &c.*[72] In this he makes it plain that he suspects "N. N." and Dr. Woodward to be the same person. He is evidently stung by the reference to his having been an apothecary, and asks:[73]

[68] Osler (*Bibliotheca Osleriana,* 3915) borrows Moore's epithet, and also his incorrect dates of publication of Quincy's *Dispensatory* and *Lexicon.*

[69] IV, 8.

[70] IV, 21–22.

[71] IV, 20.

[72] VI, 99. This *Letter* is not paginated separately, but occupies pp. 97–115 of the 2d edition of IV.

[73] VI, 100.

"Does not he [N. N.] know that you [Woodward] served an Apprenticeship to measure Cloth?" Quincy asks[74] whether all that he has said is "to go for nothing, for no other Reason, but because I have been an *Apothecary?"* Is a draper supposed to know more of physic than an apothecary?[75] On the charge that he is "an obscure person," Quincy advises that Woodward should seek evidence from a bookseller. Quincy unquestionably has the better part of the controversy, and his criticisms are, on the whole, valid.

Quincy's *Lexicon Physico-Medicum*

Quincy's *Lexicon physico-medicum: or a new physical dictionary . . .* was first published in 1719,[76] a year after the publication of his *Dispensatory.* A second edition appeared in 1722, the year of Quincy's death. With the third (1726) edition, the word *Physical* in the title is altered to *Medicinal.* The *Lexicon* must have enjoyed considerable popularity, and, indeed, have become a standard work, for, like the *Dispensatory,* it long survived its author. New words were incorporated by anonymous editors, as they gained currency. *Antiseptics,* for example, appears for the first time in 1767 in the eighth edition. Nevertheless, the work remained substantially the same until the end of the eighteenth century, retaining even Quincy's original preface, which must have seemed increasingly obsolete in its iatrophysical character. An eleventh edition was published in 1794, and two further editions appeared.

In 1802, Robert Hooper, M.D., published a new and revised version, under the title of *Quincy's lexicon-medicum. A new medical dictionary.* In his preface he refers (p. i) to the thirteenth edition as containing "very many of the absurdities of his [Quincy's] day." Hooper adds (p. ii): "When, therefore, the editor of the present edition was solicited to undertake its revision, he thought he could not do a more acceptable office to the public, than almost wholly new model it." He also remarks that the whole of his own *Compendious medical dictionary* has been introduced into this edition. . . ." This, in spite of its title, was a work of very modest dimensions, of which a second edition had appeared in 1801. It is a remarkable tribute to the popularity and power of survival of Quincy's *Lexicon* that Hooper should have considered it advisable to sacrifice the identity of his own work, in favour of re-editing such a veteran. In later editions, all references to Quincy were omitted, and the work became well known both in Britain and the U.S.A. as Hooper's *Lexicon medicum: or medical dictionary.*[77]

[74] VI, 101.
[75] VI, 107.
[76] Moore in the *DNB* gives 1717.
[77] A copy of Hooper's first edition (1802) is

In his preface to the original work, Quincy points out[78] that the "Study of Medicine has in all Ages been influenced by the Philosophy in Vogue," and that, "since the Introduction of Mathematical Reasoning, and the Application of Mechanical Laws . . . the Books of Physicians abound in Terms very unmanageable. . . ." Blancard's *Lexicon medicum* [1679] is, he says, now entirely outmoded. The well-known lexicon [1598] of Bartolommeo Castelli, although "a Work of Exactness and Labour," is most useful for "a Critical Reader of the Antients." Quincy adds, however, that "what is therein of common Service, is here carefully retained."[79] Harris's *Lexicon technicum magnum* is dismissed as a mere transcription of Blancard.

One of Quincy's principal objects in preparing his lexicon was to include the new technical terms used by "modern Physical Writers." There has hitherto, he points out, been no similar work in which definitions of such words as *Momentum* or *Moment* can be found. Physics and medicine, he says, cannot subsist without one another, for which reason he includes "all such Parts of natural Philosophy and mechanic Laws as are necessary *Præcognita* to some practical Rules of Medicine." He warns the reader that he must not therefore be surprised to find "a great deal about *Attraction,* the *Laws of Motion, Gravitation, Air, Winds, Tides, Light, Heat, Cold,* and the like."[80]

Quincy then launches into a confession of faith which might well be that of a modern scientific physician, excepting only the specific emphasis upon mechanical science: "And because what is brought from *Physics* and *Mechanics* takes up so much Room here, it may be necessary to inform the Reader, that there is no Knowledge in Medicine but by such Means. Experience without Theory will never make a Physician, any more than Practice can be obtained without an Acquaintance with the Rules on which it is founded; and he that is conducted only by Appearance, without being able to reason about their minutest Differences, will never see an Error till past Recovery. Whoever tries the Powers of his own Mind in Attention upon these Matters, will find no true Satisfaction but upon the same Assistances and Means of Conviction, as he obtains any Acquaintance with ordinary Machines, and all Compositions of Matter. If there be any-

in the author's possession. The only other copy that he has been able to trace in London is in the Wellcome Historical Medical Museum. This copy has a defective title-page, from which the title is completely missing. An advertisement of a "New Edition" appears at the back of Sir Gilbert Blane's *Elements of medical logick,* London, 1819. The work is there described as "Hooper's Quincy's Lexicon," and its title is given as *Quincy's lexicon medicum. A new medical dictionary.* The title of the 5th edition (1825) does not contain Quincy's name. An 8th edition was published in 1848.

78 V, ix–x.

79 V, xi.

80 V, xiii–xiv.

thing of Science in Medicine, it is conducted by Demonstration, because conversant with Objects cognizable only by the Evidence of Sense; but without this, it is Chance and Confusion: and the Enthusiast and the Empiric are upon as good a foot as the Scholar and Physician."[81]

Quincy is evidently sensible that this is a counsel of perfection, for he disclaims the intention of being "understood to speak of Certainty in all Instances of Practice, because there are more *Data* required to that than the Nature of Things can admit of." Nevertheless, he adds, "the Theorist will come at more of those *Data* than any other, and in every step be able to compute all the Chances that are risqued on either side of a disputable Case; whereas the Empiric and the Experimenter are altogether in uncertainty, having no Rules to make even Observation it self of real use."[82] Quincy uses the term "experimenter" in the sense of one who does something without knowing why he is doing it. He is equally opposed to "hypothetical"—as opposed to "mechanic"—writings which, he says, "amuse and flatter a Reader into a Loss of all Distinction between *something* and *nothing*" and "convey Ideas that are vague, delusory, and confused." As an example of the two kinds of writing, he invites his readers to compare "an *Essay on Poisons*" [Mead's *Mechanical account of poisons*] with [Woodward's] *State of physic*. Between them, he says, there is as much difference as between "*Euclid's Elements* and *Cornelius Agrippa's Occult Philosophy*, between Knowledge and Ignorance, Science and Chimera."[83]

The lexicon runs to over four hundred pages and contains, at a very rough estimate, about ten thousand entries. Quincy loses no opportunity of airing his quite considerable knowledge of physics. Thus, under the entry "Vision," he gives a five-page account of the eye as an optical system, including an explanation of myopia and presbyopia. The anatomy of the eye is discussed in detail under a separate entry. Nor is there any lack of ingenuity in the "explanation" of the bodily functions and the actions of drugs on "mechanical principles."

Quincy on the Plague

In 1720, there was an epidemic of plague affecting the Mediterranean seaboard of France.[84] This epidemic aroused considerable apprehension on the other side of the English Channel, and the British Government called upon Mead for his advice, as a result of which a system of quarantine

[81] V, xiv–xv.
[82] V, xiii–xiv.
[83] V, xv.
[84] Hirsch, A. *Handbook of geographical and historical pathology*, London, New Sydenham Society, 1883, vol. 1, p. 502.

was instituted. Mead published his views in his *Short discourse concerning the pestilential contagion, and the methods to be used to prevent it* (1720), which passed through no less than seven editions in one year.[85]

Quincy rather opportunistically took advantage of the prevailing interest in the plague to publish in 1720 an English translation[86] of *Loimologia,* Nathaniel Hodges' well-known work on the plague which had first appeared in Latin in 1672. Quincy evidently made a spirited effort to place his translation on the market while the subject was still topical, for in his preface he asks readers to excuse any "Incorrectnesses of Style, or Typographical Errors," because of "the great Hurry which these Sheets passed through the Press in."[87] The first edition must have been very rapidly exhausted, as the second edition (1720) contains the same apology for haste. In the third and last edition (1721), this is omitted, and there are some additional remarks in the preface. Quincy adds to his translation of *Loimologia* a 61-page essay of his own—*Of the different causes of pestilential diseases, and how they become contagious. With remarks upon the infection now in France, and the most probable means to prevent its spreading here.* It is noteworthy that the title implies the assumption that the plague is in fact contagious—which was a matter of controversy and the principal issue upon which Mead was consulted by the Government. Quincy makes no reference to Mead's *Short discourse,* and it is possible—and indeed probable, in view of the haste with which Quincy's publication was issued—that he was first in the field. There is certainly no lack of references to Mead's other writings. However, the third edition of Quincy's essay is still without reference to Mead's tract on the plague, although some other additions have been made.

The essay is of a highly theoretical character and contains little of interest. Discussing whether the plague should be attributed to "the immediate Wrath of Heaven," Quincy shows a commendable tact in the manner in which he avoids the impression of discounting divine omnipotence. "Although," he says, "too great a Regard cannot be had to the Author of our Beings, yet Care should likewise be taken, not to ascribe every Calamity to the immediate Exertion of the Almighty Power."[88] He hastens to add, however, that the Divinity, operating through natural causes, enjoys ultimate responsibility.

Characteristically, Quincy subscribes to the mechanical view of the pathology of the plague, basing himself largely upon Bellini on *Fevers* and

[85] [MacMichael, W.] *Lives of the British physicians,* 2d ed., London, 1857, p. 160.
[86] IX.
[87] IX, vi.
[88] IX, 232.

Mead on *Poisons.* The contagious particles are *spicula,* and antidotes are to be sought among those substances which will mix with the spicules[89]—thus neutralising their damaging effects upon the tissues.[90] Venomous spicules "that are on float" in the atmosphere may be "covered" by fumigations of aromatic drugs, thus ensuring that an antidote will be conveyed with the poison as it enters the body.[91] This supposed mechanical association of poison and antidote recalls Ehrlich's bizarre pictorial representations of his side-chain theory of immunity. Quincy was opposed to the use of purgatives in treatment, on the ground that the loss of fluids involved would give "more Liberty for any Things noxious without, to insinuate into the Pores."[92]

Prælectiones Pharmaceuticæ

When Quincy died, he left behind the manuscript of a course of lectures on pharmacy which he "undertook publickly to profess and teach . . . by that instructive and entertaining way of experimental course; where all the various medicinal materials, instruments and methods of operation were actually exhibited and submitted to the examination of the spectators."[93] The manuscript was published in 1723 by Peter Shaw, who prefaces the volume with a fifteen-page account of the state of pharmacy, its importance for medical practice, and the beneficent influence of Quincy in having furthered necessary reforms.

Pharmacy, he says, has been overspread by a "deluge of fraud and corruption," is debased by "scandalous tricks and impositions" on the part of "that detestable tribe of mercenary mystics, who studiously concealed what little they knew of their art, in order to make a merchandize of medicine."[94] At last, however, "a reformation is begun . . . and that servile copying of injudicious compilers and gothic writers is less seen among us. Our shops, likewise, are, in some measure, eased of the unwieldy lumber, under the load of which they long have groaned; *Salmon* no longer keeps his high swoln character, and even *Fuller* and *Bates* will hardly pass for perfect patterns in the extemporaneous way of recipe-writing."[95] The improvements "so conspicuous in the extemporaneous prescriptions of some modern physicians," says Shaw, are "greatly owing

[89] IX, 279.

[90] Quincy elsewhere (I, xlix) advances a similar explanation of various forms of exercise upon "praeter-natural acidity in any of the juices." By increasing the motions of the fluids, "such particles as were before pointed . . . will have by degrees their *spicula* broke, and their angles struck off. . . ."

[91] IX, 282.

[92] IX, 288.

[93] Peter Shaw, preface to XI, p. xiv.

[94] XI, vii.

[95] XI, vii–viii.

to [Quincy's] example." Nevertheless, "that gothic manner, that crouded and perplext composition of a barbarous people in a barbarous age, has taken such deep root in our minds, that it is not to be expected we should suddenly drop it, and fall in with that simplicity and elegance, that neatness and uniformity which *Dr. Quincy* has shewn in prescription."[96] In the lectures now published, the reader "will be delighted to observe . . . how stedfastly the author perseveres in his resolution of promoting, by all honest means, the improvement of medicine" and of "detecting and exposing those two vices so destructive to physic, ignorance and knavery." No further words on Shaw's part are necessary: "it is abundantly sufficient that the subject is pharmacy, and *Dr. Quincy* the author."[97]

Whatever excesses of iatrophysical conjecture Quincy may have committed in his other writings, the substance of his pharmaceutical lectures is essentially practical. In his first seven lectures he deals with simples: how to distinguish and classify them; what forms are most suited to them; how to prepare various salts; what can be done with mercury by sublimation, precipitation, ablution, burning, and trituration; antimony and its preparations, including *Regulus antimonii, Crocus metallorum,* and *Bezoarticum minerale;* sal armoniac, and other mineral preparations. In the eighth lecture he deals with the three principles: spirit, oil, and salt, and the methods of obtaining them from simples. In the ninth chapter he gives general directions for collecting and preserving simples, and the tests by which they may be distinguished from counterfeits. At the end of this chapter there is a list of substitutes for various drugs, adapted from the chapter *De succedaneis* of Sassenus's *Animadversiones in pharmacopœam Bruxellensem.* The remaining nine chapters are concerned with pharmaceutical compositions. Medicinal composition is "a contrivance to obtain ends from those materials in conjunction, which cannot be answered to equal advantage from any of them single."[98] Quincy then refers to the suggestion made by Diemerbroeck, in his notes upon theriac, that "the composition is not only a more efficacious medicine from the concurrent powers of so many ingredients . . . but that the several simples contained therein, do, as it were, over-act their parts, by a mutual emulation, which separately, they would not be so provoked to do."[99] He regards this theory of synergism as plausible, but does not commit himself to its acceptance.

Quincy advises that medicine should always be disguised as much as possible, "both by prescribing them in terms the least commonly known, and reducing them into forms as different as possible from what a patient

[96] XI, x–xi.
[97] XI, xv.
[98] XI, 97.
[99] XI, 98.

hath been accustomed to discover them in. Without this care the best prescriptions are frequently lost by a prejudice. . . ." Further justifying his advocacy of concealment, he points out "how much the reputation of a cure hath been lost, by divulging the means by which it was effected," and he adds a plea for the professional interests of the apothecary, "whose attendance requires more than the common profits of trade, which every patient hath not the generosity to allow for, when they know the things prescribed."[100]

Subsequent chapters deal with distillation; the preparation of tinctures, decoctions, and infusions; syrups and conserves (which are said to have been lost by the apothecary to the confectioner); powders, troches, and pills; electuaries, including the ancient and famous mithridatium and theriac; extemporaneous electuaries, linctuses, emulsions, juleps, and draughts; the officinal topics—oils, ointments, and plasters; and a final chapter on the advantages of extemporaneous topics, including liniments, lotions, gargarisms, and fomentations. The chapter concludes "with a catalogue of such things as are useful to keep for specimens in a collection." Throughout these lectures there is a minimum of speculative reasoning, and the writer is clearly an experienced practitioner who speaks with complete assurance of practical matters of which he knows himself to be a master.

However, added as an appendix, is an essay by Quincy entitled *A mechanical account of the operations of medicines on a human body*. The essay opens with four postulates, the first of which states that "all those parts of a human body which are vascular, or thro' which any fluid passeth, from the intestines to the minutest fibre, are the seat of operations of medicines."[101] Quincy then develops the theory that the body is a sort of system of filters of diminishing mesh, particles of different sizes being arrested at different stages. The largest particles, or those with the sharpest angles, reached only the stomach, whence they were rejected by vomiting. Particles in the next grade of size or smoothness attained the bowels, and were discharged via the anus. A further "comminution and smoothing its figure" enabled the medicine to gain admittance to the bloodstream—or to "all that space within the blood's motion, so far as it retains its red color"—whence it was excreted via the kidneys. A medicine in a state of "still farther comminution will pass . . . into the minutest canals, where by the same properties [as those of the larger particles], only in lower degree, it will cause sweat, or increase [insensible] perspiration."[102] From

[100] Compare use of pink aspirins in the twentieth century.

[101] XI, 205.

[102] XI, 207. That Quincy's generalization em-

this, Quincy argues an essential similarity in the operations of medicines, differences in their actions depending on their seat of operation, which was determined by the size and shape of their particles.

In spite of the continuing popularity of Quincy's *Dispensatory* and *Lexicon,* the *Prælectiones pharmaceuticæ* did not achieve a second edition. Yet, apart from its appendix, it is distinguished from all Quincy's other writings by its practical and objective character.

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bodied some truth is shown by the following quotation from Barnes, J. M. and Trueta, J. *Lancet,* 1941, *1,* 623: "The path of absorption of chemical substances apparently depends on the size of their molecules: the smaller molecules are absorbed by the blood-stream, the larger by the lymphatics." These writers showed that obstruction of the lymphatics prevented the absorption of Russel-viper venom, which has a molecular weight of over 20,000, but that cobra venom, which has a molecular weight under 5,000, was absorbed (via the blood-stream) under similar conditions. This example of "mechanical reasoning" would surely have appealed to Quincy.

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XI. Prælectiones pharmaceuticæ: or a course of lectures in pharmacy, chymical and galenical; explaining the whole doctrine of that art. By the late learned Dr. John Quincy. Published from his original manuscript by P. Shaw, M.D. London, 1723.

Acknowledgments

The writer is grateful to Dr. E. Ashworth Underwood for permission to use the valuable library of the Wellcome Historical Medical Museum, and also for the photographic prints for Figures 2 and 3.

He is also indebted to the Medical Society of London and the Pharmaceutical Society for permission to visit their libraries.

New Documents on Volcher Coiter

DOROTHY M. SCHULLIAN*

THE death of Dr. B. W. Th. Nuyens on 20 October 1945 removed a scholar whose contributions to our knowledge of the life of Volcher Coiter have been outstanding. His two masterly articles in *Nederlandsch Tijdschrift voor Geneeskunde*[1] adduced from the *rotuli* of the University of Bologna new evidence on Coiter's years there. They also revealed to medical historians the imprisonment of Coiter in Italy in 1566 for religious reasons, the efforts of his friend Joachim Camerarius the Younger to bring him to Germany, and, from a document in the Stadtarchiv in Nürnberg dated 6 October 1569,[2] his appointment as town physician for a period of five years at a salary of 100 Rhenish florins a year.

Through a fortunate chain of circumstances it is now possible to present further evidence on Coiter's activities in Nürnberg. The Army Medical Library possesses an inscription in his hand to one of the councilors of that city. Investigation of it has led to the discovery of similar inscriptions in

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[1] "Doctor Volcher Coiter, 1534–1576?" 1933, *77*, 5383–5401; and "De laatste tien Jaren van Volcher Coiter's Leven," 1935, *79*, 2653–2659. These will be designated hereafter as Nuyens I and Nuyens II respectively. The first article is printed also in *Bijdragen tot de Geschiedenis der Geneeskunde*, 1933, *13*, 251–269.

Historians of medicine will await with great expectation the anthology of Coiter which was undertaken some time ago by the Dutch Society for the History of Medicine and will appear shortly in the series *Opuscula selecta Neerlandicorum de arte medica*. In addition to the Latin text and an English translation of Coiter's works, it will provide a biography of him and an essay on his services as a physician by Dr. Nuyens, and a treatise on his place as comparative anatomist, physiologist, and embryologist by Dr. A. Schierbeek, Lecturer on the History of Biology in the University of Leyden. It will issue from the press appropriately enriched by the critical revision of Dr. Charles Singer, who in *The evolution of anatomy* (New York, 1925, pp. 148–153) had signalized the achievements of Coiter. A biography in German is also in process of preparation by Dr. Robert Herrlinger of Münchsteinach.

Brief accounts of Coiter, of varying value, may be found in Johann Schenck, *Observationes medicae de capite humano* (Basel, 1584, f. [5b]); Melchior Adam, *Vitae Germanorum medicorum* (Heidelberg, 1620, p. 227); Hendrik Eysson, *De ossibus infantis cognoscendis, conservandis, & curandis. Accessit Volcheri Coiteri eorundem ossium historia* (Groningen, 1659, ff. [6b–9b], pp. 171–174, and the elegiacs on Coiter by Antonius Berckhuys on pp. 201–203); Christian Wilhelm Kestner, *Medicinisches Gelehrten-Lexicon* (Jena, 1740, pp. 207–208); Will-Nopitsch, *Nürnbergisches Gelehrten-Lexicon* (hereafter cited as W-N), 1755, *1*, 213 and 1802, *5*, 187; Albrecht von Haller, *Bibliotheca anatomica*, 1774, *1*, 234–235 and *Bibliotheca medicinae practicae*, 1777, *2*, 187; W. E. Ludeking, *Levensberigten en letteruchten van Nederlandsche geneeskundigen. . . .* (Brielle, 1847, pp. 178–180); Friedrich A. Reufs, "Volcher Coiter," in *Anzeige für Kunde der deutschen Vorzeit*, 1859, n.s. 6, col. 285; *Allgemeine deutsche Biographie* (hereafter cited as ADB), 1876, *4*, 397; E. Gurlt, *Geschichte der Chirurgie und ihrer Ausübung . . .*, 1898, *3*, 284–286; *Nieuw Nederlandsch Biografisch Woordenboek*, 1912, *2*, coll. 717–718; *Biographisches Lexikon der hervorragenden Aerzte*, 2te Aufl. (hereafter cited as BLA), 1930, *2*, 68–69 and Ergänzungsband (1935), 186; J. G. De Lint, "De Tentoonstelling en het Portret van Volcher Coiter te Leiden," in *Nederlandsch Tijdschrift voor Geneeskunde*, 1934, *78*, 2486–2487; M. F. Ashley Montagu in *Ciba Symposia*, 1949, *10*, 1020. A portrait of Coiter is described in E. Weil's Catalogue 7 [1945], p. [3].

[2] Rep. 83, II, 22.

other libraries. In addition, a search of printed catalogues of manuscript books has uncovered three letters by Coiter in Erlangen, and the files of the Staatsarchiv[3] in Nürnberg have yielded rich glimpses of his work as town physician. What began therefore as a short note on the inscription in the Army Medical Library has, with the gracious help of several librarians and scholars who will be mentioned individually later, assumed its present longer form. All documents are transcribed in full at the end of this paper, and for several in Coiter's hand photographs are furnished. Translations and paraphrases from extensive portions of them, with interpretative and connective remarks, constitute the body of the paper.

I

Coiter was moving in Nürnberg in a circle of which the eminent physician Joachim Camerarius the Younger was one of the greater lights. It is natural that the two men should have maintained and even strengthened in Nürnberg the friendly relations of earlier years.[4] On the side of Camerarius there was in addition the protective feeling entertained by a true gentleman of renowned lineage and talents for a gifted foreigner working in his own profession. So it was that on occasional absences from Nürnberg Camerarius entrusted to Coiter certain of his patients and received from him detailed reports of developments. Writing to Camerarius in Bamberg on 5 May 1572[5] Coiter gives evidence of this arrangement. "You know," he says,

> that your absence causes me much sorrow and inconvenience. But since I cannot now enjoy you in person, I have determined to talk with you by correspondence, as you asked when you left. I shall write you the news pertaining to our profession, which will perhaps be not unwelcome to you. . . .

He had, he continues, attended for Camerarius the wife of a nobleman who was suffering from the tertian disease. In another case he had recom-

[3] The documents in the Staatsarchiv were known to M. Weigel, who mentions them briefly, in connection with Coiter's work in Amberg, in "Stadtärzte und kurfürstl. Regierungsärzte in Amberg," *Verhandlungen d. historischer Vereins v. Oberpfalz und Regensburg*, 1936, *86*, 387. I have been materially aided in the interpretation of the early, archival German of these documents by Mrs. Walter Rado of Cleveland, Ohio.

[4] In the Prooemium to the *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis* (Nürnberg, 1575) Coiter acknowledges his indebtedness to Camerarius for assistance in that work. Accounts of Camerarius are found in Adam, *op. cit.*, pp. 344–356; W-N, 1755, *1*, 173–174 and 1802, *5*, 145; and BLA, 1929, *1*, 808.

[5] Document A.1. I am deeply indebted to Dr. F. Redenbacher, Direktor of the Universitätsbibliothek in Erlangen, for photographs of the Erlangen documents transcribed in this paper. My first knowledge of the three letters of Coiter to Camerarius came from the catalogue of Eleonore Schmidt-Herrling, *Die Briefsammlung des Nürnberger Arztes Chr. J. Trew* (1940) (vol. 5 of *Katalog der Handschriften der Universitätsbibliothek Erlangen*), where they are briefly listed on p. 111.

mended guaiac wood cooked with sarsaparilla, since the warmth of the liver was not so great as to retard the working of the decoction, and he had also suggested cautery. He was awaiting, however, the advice of Camerarius in the affair.

The proud name of Imhof appears in the same letter. Willibald Imhof (1519–1580), grandson of Willibald Pirckheimer, connoisseur of medals and antiquities, and custodian of the renowned Pirckheimer collection, was much concerned in the spring of 1572 about the health of his younger son.[6] "Willibald Imhof Sr.," writes Coiter,

> has asked me to solicit your advice on behalf of his younger son, who is suffering from almost the same type of catarrh as that which afflicts Eustachius Unterholzen, but whereas the latter has a thin and watery catarrh in the innermost portions of his chest, the former is distressed in the outer parts. For it seizes upon the muscles of his neck and descends between skin and muscles to the ensiform cartilage. He coughs continually, but for the most part unproductively. What he spits out by coughing or hawking is thin and watery, and sometimes full of foam, but rarely thick, sometimes sourish but rarely or never salty. He contracted this catarrh as a result of the intense cold which he endured in his daily journeys during the winter, and likewise from eating fruits hourly and from drinking large amounts of water or the chest potions which the Italian physicians prescribed for his cough. This catarrh seems to be fostered by a weakness and relaxation of the stomach. Dropsy has arisen from excessive use of sweet, wet, and cold foods, and also from the warm state of the liver. Proofs of this are the vomiting, which is sometimes full of bile, and many other things which, since you are familiar with his constitution and the constitutions of his parents, it is superfluous for me to relate.
>
> The Italian doctors with their customary remedies have tormented him no end. They thought the catarrh was salty, and they used therefore chilling and thickening concoctions, much, I fear, to his harm. Cautery has been applied at one arm, as a result of which the distress has stopped in some measure on the other side of the jaw. I prescribed for him a drying regimen of food, and used medicines which purge and then dry without evidence of warmth, and from this treatment he has experienced no small benefit and would have experienced more had he persisted in it.
>
> Since the catarrh has not stopped, his and his wife's parents have strongly insisted that I begin another treatment and seek your advice in this matter. I promised to give my opinion to you in writing. To be brief, I have decided that the first step should

[6] Father and a son Willibald (1548–1595) are listed in Johann Gottfried Biedermann, *Geschlechtsregister des Nürnberger Patriziats* (Nürnberg, 1748), Tafel CCXXXVI. This book is not located for this country by the Union Catalog of the Library of Congress, and I owe my information from it to the kindness of Dr. Solleder, Direktor, and Dr. Gerhart Hirschmann of the Staatsarchiv in Nürnberg. W-N (1756, *2*, 231 and 1805, *6*, 171), in sections on another son, Johann Imhof III (1563–1629), set forth the relationship with Pirckheimer. See also *ibid.*, 1757, *3*, 190 and 1806, *7*, 165–166.

I should like to acknowledge here a much deeper debt to Dr. Solleder and Dr. Hirschmann. To them I owe in addition the transcriptions in this paper from the Ratsverlässe, Verlässe zum Losungsamt, Briefbücher, Stadtrechnungen, and Handschriften of the Staatsarchiv; my acquaintance with the work of Dr. August Jegel of Nürnberg and Dr. Robert Herrlinger on Coiter; and my knowledge of several books and articles which have been of immense help to me and which will be cited below. They have been very gracious also in bringing to my attention possibilities for further research on Coiter which I hope to investigate at a later date.

be purging and phlebotomy, and it is my belief that then either a decoction of sarsaparilla prepared with a small portion of wood and certain vital herbs should be given to him, or he should visit the waters at Göppingen because of the power they have to both dry and strengthen when no deficiency of the heart is involved. But if those waters are too chilling, he might bathe finally in the ones at Celle. Please send me in a few words your considered judgment on his condition, which because of the opposing weakness of the principal parts is not altogether easy to treat.

Whatever the outcome on this occasion, whatever the advice which Camerarius sent to Coiter, we are grateful for another document which confirms Coiter's connection with the Imhof family. In the same year he inscribed a copy of his *Externarum et internarum principalium humani corporis tabulae*[7] to Willibald Imhof Sr. with the following words:

To a man distinguished for learning, good sense, and courage, the honorable Willibald Imhof Sr., patron of the Muses, fosterer of the liberal arts, zealous student of antiquities, his protector, the author respectfully gives and presents this book.[8]

The inscription is couched in the honorific Latin of the day, but the somewhat florid form it takes does not detract from the sincerity of its sentiment.

There is a connection also with the noble name of Kress. Christoph Kress III (1541–1583), younger by seven years than both Camerarius and Coiter, was the eldest son of Christoph Kress II (1515–1560) and his first wife Dorothea Haller. After her death in 1554 the father married Katharina Imhof, daughter of Andreas Imhof. Katharina in turn remarried in 1566, and when she died in 1574 her second husband Tobias Tucher took as wife another Katharina Imhof, daughter of Willibald Imhof Sr. and Anna Harsdörffer.[9] It was the good fortune of our Christoph Kress III to have a father determined and able to provide the best education available for his children. In 1556 Christoph was sent to Leipzig to the house of Joachim

[7] Nürnberg, 1572.

[8] Document H, on the title-page of the copy in the Royal Society, which has courteously granted permission for its publication here. I am informed by the Royal Society that the copy belongs to a collection which includes a number of volumes from Pirckheimer's library and which was presented in January, 1667, by Henry Howard, afterward sixth Duke of Norfolk, whose grandfather, the Earl of Arundel, had purchased a great portion of it in Vienna during his embassy there in 1636. Cf. W-N, 1806, *7*, 166, and 1808, *8*, 468. My first knowledge of this document came from Prof. Howard B. Adelmann of Cornell University, whose valuable work on Coiter's "De ovorum gallinaceorum generationis primo exordio progressuque et pulli gallinacei creationis ordine" was published in *Annals of Medical History*, 1933, *n.s.5*, 327–341, 444–457, and was followed by a note in the same journal, 1938, *10*, 189–190, by Walton Brooks McDaniel, 2d. In a letter of 12 July 1949 Prof. Adelmann referred me to the reproduction of the inscription in F. J. Cole's *History of comparative anatomy* (London, 1944, p. 74). Prof. Cole in turn encouraged me in several letters to further study of the inscription and identification of the recipient. The contributions of Coiter in comparative anatomy are excellently set forth in Prof. Cole's history, pp. 73–83.

[9] On the genealogy see the book recommended to me by Dr. Solleder, Karl Friedrich von Frank zu Döfering, *Kress family history* (Vienna, 1930, nos. 217, 228), and also W. Loose in *Mitteilungen des Vereins für Geschichte der Stadt Nürnberg*, 1881, *3*, 37–38.

Camerarius the Elder, and over a period of three years his letters to his father[10] attest the wise and loving training which he received at the hands of the renowned professor and his devoted wife. The letters end almost without exception with affectionate greetings to Christoph's stepmother and to her father Andreas Imhof. In one, under date of 14 September 1556,[11] there is mention of Willibald Imhof, great-nephew of Andreas, with whom Christoph's brother Friedrich Joachim[12] had gone to France. In several[13] we meet the son of Camerarius who was to become the renowned physician and botanist of Nürnberg and the friend of Volcher Coiter.

Christoph proceeded in the fall of 1559 to further study at Bologna,[14] where he was still located at the time of his father's death in 1560. Coiter was also there in that year,[15] and it is pleasant to speculate that the two may have met and that Christoph Kress III may have played some part in the later efforts of Joachim Camerarius the Younger to bring Coiter to Germany. In any case, two inscriptions in Coiter's hand bear witness to his high regard for Kress in the years 1572 and 1575. The first carries the signature of Kress above it, and both reveal the sincere gratitude of the writer:

> To that most sagacious man, the honorable Christoph Kress, councilor of Nürnberg, his protector, who deserves the highest respect, the author of this book gives and presents it.[16]
>
> To that most distinguished man, eminent in erudition, discretion, courage, and lineage, the honorable Christoph Kress, revered protector and patron, the author of this book gives and presents it.[17]

II

The documents present tantalizing glimpses of Coiter's relations with other members of the medical profession in Nürnberg and elsewhere. Under date of 5 May 1572[18] he sends to Camerarius a consilium for one Dr. Jugelius. "However," he adds with understandable annoyance,

[10] Georg Freiherr von Kress, "Briefe eines Nürnberger Studenten aus Leipzig und Bologna (1556–60)," *Mitteilungen des Vereins für Geschichte der Stadt Nürnberg*, 1895, *11*, 97–172. I am indebted to Dr. Solleder for this reference.

[11] *Ibid.*, p. 116, no. 8.

[12] Frank zu Döfering, *op. cit.*, no. 229.

[13] Kress, *op. cit.*, no. 19 (13 October 1557), no. 23 (7 February 1558), no. 24 (8 February 1558), no. 25 (25 February 1558), no. 33 (18 February 1559), no. 34 (18 March 1559).

[14] We are reminded of the younger son of Willibald Imhof Sr., who also traveled to Italy. See Document A.1.

[15] Nuyens I, p. 5385.

[16] Document B, on the title-page of the copy of his *Externarum et internarum principalium humani corporis tabulae* (1572) in the Universitätsbibliothek at Erlangen. I owe my first knowledge of this inscription to the reference in Dr. August Jegel's paragraph on Coiter in *Die medizinische Welt*, 1933, *7*, 1122. I am likewise indebted to Dr. Jegel for Documents C.14 and 22, which are not included for Coiter in the Register of the Ratsverlässe and which he has sent to me through Dr. Solleder.

[17] Document I, on the title-page of the copy of his *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis* in the Army Medical Library of Washington. This volume is housed at present in Cleveland, Ohio.

[18] Document A.1.

Dr. Jugelius follows neither the consilium of Erastus nor mine, but one drawn up by his sister, who has prepared for him a decoction of wood far different from that prescribed by Dr. Erastus, made to be sure with wood and root of tormentil, bark of the wood, and sarsaparilla. Although I can find no fault at all with this decoction, I am nonetheless vexed that Dr. Jugelius should have deviated from the prescription of Dr. Erastus right at the very threshold of the cure. But such seems to be the common habit of all men and especially of learned men.[19] Please return this consilium to me as soon as you can.

The Dr. Erastus mentioned here was Dr. Thomas Erastus (1525–1583), the distinguished physician of Heidelberg and Basel[20] whose published works include a refutation of certain doctrines of Paracelsus.[21] It is gratifying to learn from the same letter that he was in touch with Coiter concerning the progress of this work and of his investigations on Theophrastus. "Erastus," says Coiter,

has written me here several times and among other things that he is much displeased with his writings on Theophrastus, and since they cannot take vengeance in any other way they accuse him of Arianism. He adds that the third part of his disputations against the doctrine of Paracelsus, which he writes contains much splendid and useful material, is almost finished. I think the second part is already in your hands.

Physicians like Erastus, Camerarius, and Coiter, provided with a common background of solid training in Germany and Italy and endowed with an investigative spirit which made them leaders in their field, must have been especially exasperated with the dubious and even fraudulent methods employed by less reputable workers in their profession. Coiter had brushes on more than one occasion with the barber surgeons. Threats of the barber Michael Hohler against him resulted in legal action and the sentencing of Hohler; on Coiter's intercession, however, he was dismissed with a reprimand.[22] Coiter complained in turn of the barber Mathes Leitkirchner, who was thereupon confined in a tower for three days.[23] On the physician's accusation that barbers in general were giving their patients medicines the authorities took steps to institute regulatory measures.[24] But Coiter was nonetheless willing and eager to convert to the uses of legiti-

[19] Without identification of Dr. Jugelius it is difficult to say whether Coiter is using the word "doctorum" of physicians in particular.

[20] Adam, *op. cit.*, pp. 142–146; N. F. J. Eloy, *Dictionnaire historique de la médecine*, 1778, *2*, 150–151; ADB, 1877, *6*, 180–192 and 1889, *29*, 774; Eberhard Stübler, *Geschichte der medizinischen Fakultät der Universität Heidelberg 1386–1925*, Heidelberg, 1926, pp. 42–53; BLA, 1930, *2*, 422 and Ergänzungsband, 1935, 267–268.

[21] *Disputationes de medicina nova Philippi Paracelsi*, Basel, 1572–73, 4 parts.

[22] Documents C.2, 3.

[23] Document C.13.

[24] Document C.9. Coiter's printed remarks on this whole subject are very strong. See his *Externarum et internarum principalium humani corporis partium tabulae*, Epistola Nuncupatoria and pp. 57, 110, 112. For the text I have used throughout the 1573 edition of this work.

mate medicine innovations which promised relief to the sick. "New empirics," he writes to Camerarius,[25]

have approached us promising sure and complete cure of the gout, and among them a woman who, as I have succeeded in finding out, concocts from rare greens an oil by which she entirely routs in a short time all pains of the gout. Do please write me in full if you know or have read anything of this. I also shall prepare this oil. I am strongly convinced that it is an anodyne. . . .

We can discern behind the scenes the progress of professional organization and some vexation with the conduct of the town council in medical matters. Discussing a pernicious disease, perhaps the pest, which is prevalent in the city, Coiter writes as follows to Camerarius:[26]

I think you have already learned, through a letter from Dr. Palm,[27] what instructions our council has given us for driving out this pestilential disease and what limit has been set. Dr. Wolf[28] has proposed an infinite number of remedies of the Paracelsan kind, but not a one was included in the memorandum handed to the council.

In the same letter, dated 5 May 1572, he cynically observes that the council "behaves in its customary manner against us. The oath is demanded as usual of us, of the pharmacists, and of the barbers, and is kept as before." Less than a year later, on 17 February 1573, the Ratsverlässe record[29] the request of the physicians for the foundation of a Collegium and mention the part which Camerarius had already played in preparing regulations. Discussion was to follow, and on 17 October of the same year[30] Coiter reported progress to Camerarius, once again absent in Bamberg:

Last Sunday I was at the house of Master Arer[31] for the purpose of organizing the college, and we unanimously approved your plan. We decided however on this addi-

[25] Document A.1.

[26] *Id.*

[27] Dr. Georg Palm (1543–1591), son of a Nürnberg physician and himself a graduate in 1566 of the University of Ingolstadt, entered upon his medical duties in Nürnberg in 1568. His published writings comprise only a few letters (see Johannes Hornung, *Cista medica qua in epistolae clarissimorum Germaniae medicorum . . . asservantur,* Nürnberg, 1625, pp. 262–265), but he left behind a mass of manuscript material. See W-N, 1757, *3,* 112, and 1806, *7,* 92–93. Coiter in the Epistola Nuncupatoria of the *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis* speaks with feeling of his valuable assistance, of his clinical and anatomical skill, and of their friendship. The figure of the monstrous fowl on Plate III of this work bears his initials and the date 1573. See Nuyens I, p. 5397 and Choulant-Frank, *History and bibliography of anatomic illustration,* New York, 1945, p. 210.

[28] This is very probably Dr. Heinrich Wolf (1520–1581), younger brother of the noted philologian Hieronymus Wolf and physician in Nürnberg beginning with the year 1553. He edited Arnaldo de Villanova's tract, *Von Cur des Podagrams . . .* (Strassburg, 1576). See W-N, 1758, *4,* 293 and 1808, *8,* 421–422. He was present at a dissection recounted by Coiter in *Externarum et internarum principalium humani corporis partium tabulae,* p. 114.

[29] Document C.20.

[30] Document A.3.

[31] This is probably Dr. Melchior Ayrer (1520–1579), the celebrated mathematician, chemist, and physician, who was graduated as doctor of medicine from the University of Bologna in 1546 and who practised in Nürnberg. See W-N, 1755, *1,* 45, 1802, *5,* 41, and BLA, 1929, *1,* 261. Another physician of Nürnberg known to Coiter, but perhaps only by reputation, was Dr. Hieronymus Herold, who had died in 1566. See W-N, 1756, *2,* 95 and 1805, *6,* 69; Joachim Camerarius the

tion to it, that two councilors should be designated to carry out our demands, and, if anything serious came up, to report it in our name to the whole council. So we have hoped to be relieved of the annoyance of begging if anything is to be referred to the council. This has been declared to the council today by Dr. Arer and Dr. Wolf.

The struggle, begun even before the episodes related in these extracts,[32] was long, and full success came only on 27 May 1592 when the *Collegium medicum* was formally established by the council and Camerarius was appointed its first and ever honored dean.

III

As one of the town physicians of Nürnberg Coiter had special privileges and duties which occupied probably the major portion of his time. His anatomical interests, for which until now he has been chiefly known, were furthered by the opportunities offered to him for dissection of criminals. In 1571, for example, a blacksmith caught in burglary was to be tried, and Coiter was instructed to report whether he found him a fit subject for dissection.[33] In the same year he was authorized to dissect Margret Fuxin upon her punishment for a crime not specified.[34] Four years later similar commissions were still being enjoined upon him.[35] It is probable that he seized upon all of them with alacrity. We are particularly pleased, however, to find among the extracts from the Ratsverlässe something of the background behind his anatomical publications—the esteem in which they were held by his fellow-physicians, the deliberations of the council concerning them, the financial difficulties to which they gave rise. On 17 November 1572 it is recorded that other physicians in Nürnberg were to examine the book on anatomy which Coiter had dedicated to the council and give their opinion as to what recompense was due him.[36] This was doubtless the *Externarum et internarum principalium humani corporis partium tabulae,* whose dedicatory epistle is dated 30 August 1572. For

Elder's recommendation of him in *Epistolarum familiarium libri VI* (Frankfurt, 1583, pp. 274–275); and the series of letters to him in the same collection, pp. 349–360. He is mentioned on p. 121 of Coiter's *Externarum et internarum principalium humani corporis partium tabulae.* A son Jeremias Herold was town physician from 1563 to 1600.

[32] As early as 27 December 1571, Camerarius had presented to the council a detailed plan for a local medical constitution under the title "Kurzes und ordentliches Bedenken, welcher gestalt in einem wohlgeordneten Regiment es mit den Artzen und Artzeneyen, sambt allen andern, dazu gehörigen Stücken, möcht geordnet und gehalten werden." See [Philipp Ludwig Wittwer], *Entwurf einer Geschichte des Kollegiums der Aerzte in der Reichsstadt Nürnberg. Eine Einladungs-Schrift zu der oeffentlichen Iubel-Feyer der vor zweyhundert Iahren geschehenen Errichtung desselben. Am 27. May 1792.* (Nürnberg), p. 15. Wittwer in this valuable account of professional organization in Nürnberg includes the various physicians already cited in these pages.

[33] Document C.5.

[34] Document C.8.

[35] Document C.33. Cf. Document C.29.

[36] Document C.18.

17 February 1573 a similar decision[37] is entered which referred his book on anatomy to a committee. Less than a month later, by 10 March 1573, Coiter had declared his intention of publishing further books on anatomy which would be of great help to the barbers and the surgeons.[38]

On 17 June of the same year the council's scribe discusses a work entitled *Observationes anatomicae* which Coiter had dedicated to the council.[39] Whatever the proper identification of this item,[40] its financial problems were very real to Coiter, who,

> although he has spent an enormous amount upon the copper engravings, has not yet received any recompense. Furthermore, he is at work on another book about the muscles and nerves, which he has not yet been able to finish for the simple reason that he does not have the necessary money. He asks therefore that 300 florins be granted to him as a loan, with sufficient security, for two years. The other physicians have given his previous book no little praise and, considering the diligence displayed in it, believe firmly that as much can be expected of the work in hand. It has been decided therefore to allow him 200 florins as a loan, with sufficient security, for two years without interest, and to bring up at the end of that time the question of recompense for the book.

These 200 florins were still unpaid at the end of the two-year period. In the records for 15 November 1575[41] we read that Coiter's request for renewal of the loan, due the previous July, had been granted on condition that he furnish sufficient security. The loan remained unpaid at the time of his death and will be mentioned again in the fourth section of this paper. Suffice it to say here that on 25 July 1575 the council, true to its part of the bargain, voted Coiter 50 florins[42] for his two books on anatomy.[43]

In his capacity as town physician Coiter found abundant opportunity to enhance a reputation already well established at the time of his arrival in Nürnberg. It was natural, as knowledge of his talents spread, that requests for his services should come increasingly from points outside the city. Since official permission was necessary for excursions supplementing or supplanting his regular duties, such expeditions are, happily for us, entered in the Ratsverlässe. They were made chiefly for the benefit of certain magisterial, noble, and ecclesiastical personages, and they embraced

[37] Document C.20.

[38] Document C.23.

[39] Document C.25.

[40] It is probably again the work mentioned above, published in 1572 and 1573, whose full title is *Externarum et internarum principalium humani corporis partium tabulae, atque anatomicae exercitationes observationesque variae, novis, diversis, ac artificiosissimis figuris illustratae, philosophis, medicis, in primis autem anatomico studio addictis summe utiles.* The *Observationum anatomicarum medicarum chirurgicarumque miscellanea varia* mentioned under varying titles by Adam, *op. cit.*, p. 227 and Haller, *Bibliotheca medicinae practicae*, 1777, 2, 187 occur on pp. 106–122 of this work, and the *Anatomicae observationes ex corporibus variorum brutorum dissectis* on pp. 122–133.

[41] Document C.44.

[42] Document C.37. Salary payments to Coiter are listed in Documents C.1, C bis, and E.

[43] Perhaps the *Externarum et internarum principalium humani corporis partium tabulae* and the *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis* (1575). The Epistola Nuncupatoria of the latter work is undated.

a circle of towns located at varying distances from Nürnberg. Magistrates at Vilseck,[44] Herzogenaurach,[45] and Amberg[46] were among his patients. He was called to a *Landgraf* at Pfreimd,[47] a *Burggraf* at Rothenburg,[48] a dean at Forchheim.[49] He must have been especially gratified when Pfalzgraf Ludwig, whom he had served in 1567 before transferring to Nürnberg, requested his attentions some years later.[50] Johann Philipp von Seckendorf was also anxious for his opinion, calling him once to Bamberg[51] and then requesting his services two days a week at Forchheim.[52] This second request the council found itself unable to grant; it recommended instead that the noble patient be advised to come to Nürnberg, but after further consideration gave Coiter permission to spend one day a week at Forchheim.[53]

Coiter was in Würzburg in October, 1571,[54] and his services were requested by its bishop, Friedrich von Wirsberg, in August, 1573.[55] The request was apparently connected in some way with the inability of Dr. Franz Renner[56] to oblige with his services. We are fortunate in having one other document[57] which attests Coiter's activities in Würzburg, an

[44] Document C.17.

[45] Document C.19.

[46] Document C.31.

[47] Document C.28.

[48] Document C.32.

[49] Document C.34–35.

[50] Document C.24. Coiter recounts in the *Externarum et internarum principalium humani corporis partium tabulae*, pp. 110, 111, and 122, three cases which had come to his attention during his earlier service with Ludwig, Duke of Bavaria and Pfalzgraf of Oberpfalz, with headquarters at Amberg. For a short account of Ludwig (1539–1583) see ADB, 1884, *19*, 577–580. He was in Amberg as Statthalter of Oberpfalz until the death of his father, Friedrich III "der Fromme," on 26 October 1576, when he succeeded to the reign as Pfalzgraf bei Rhein and Kurfürst. According to James Anderson, *Royal genealogies* . . . (London, 1732, Table CCLXXI, House of Simmern), "he was a peaceable prince and never meddled with other mens matters." Coiter had been granted earlier a leave of absence of six days to go to Amberg; see Document C.4. Weigel, *loc. cit.* [note 3], mentions further relations with Ludwig.

[51] Document C.10. An account of the various lines of the Seckendorf family, including the Bamberg line, is furnished in Johann Henrich Zedler, *Grosses vollständiges Universal Lexicon* . . . (1732–1750), Bd.36. Coiter had been granted earlier a leave of absence of eight days to go to Bamberg; see Document C.6, and cf. Document C.15.

[52] Document C.11.

[53] Document C.12.

[54] Document C.15.

[55] Document C.27. Friedrich was bishop from 27 April 1558 to 12 November 1573. See Pius Bonifacius Gams, *Series episcoporum ecclesiae Catholicae* . . . (Leipzig, 1931, p. 325) and the account of his life in ADB, 1878, *8*, 60–63.

[56] Franz Renner, also town physician at Nürnberg, was the author of a work entitled *Ein new wol gegründet nützlichs vnnd haylsams Handbüchlein gemeiner Practick, Aller innerlichen vnd eusserlichen Ertzney, so wider die erschröckliche, abscheuliche Krankheit der Franzosen vnd Lemung.* . . . It bears a dedication to the council dated 17 December 1556 and was published in several editions. See W-N, 1806, *7*, 245–246. An Erzneibuch of his was put at the disposition of Coiter on 30 August 1571; see Document C.14.

[57] Document G, on the title-page of the copy of the *De ossibus et cartilaginibus humani corporis tabulae* (Bologna, 1566) in the British Museum. This inscription is, according to Mr. F. Geoffrey Rendall of the Department of Printed Books, too faint for photographing and even in places illegible. I owe to his kindness the transcription of it which is printed with the documents of this paper. As elsewhere, I have expanded the abbreviations.

This is the last inscription in Coiter's hand to figure in this paper. No doubt additional, unrecorded inscriptions exist, and I shall be grateful for notice of them. I owe to M. Rieunier, Mr. James F. Ballard, Mr. Rendall, Mr. Wilson Steel, Miss Gertrude L. Annan, Miss Mildred E. Walter, and Miss Madeline Stanton the assurance, for their respective libraries, that the following copies of Coiter's works contain no inscription in his hand:

inscription in his hand to Gaspar Weber, secretary to Bishop Friedrich. Weber was a man whose friendship Coiter seems to have cherished deeply, and we should like to know more of their relations.[58]

IV

The most distant excursion made by Coiter from Nürnberg proved a tragic and final one. In the fall of 1575 Pfalzgraf Johann Casimir[59] requested his services on an expedition to France in support of the Huguenot cause. Satisfactory arrangements[60] were made concerning his salary as town physician, and on 22 October 1575 the council dispatched to the Pfalzgraf the following note of consent:[61]

> Kind sir, with regard to your sovereign majesty's gracious request and desire for the company of the learned Volcher Coiter, our physician and surgeon, we have taken note of the request, and although we ourselves are much in need of his services we have decided to accede humbly to your sovereign pleasure and to permit him to serve your highness during your trip. We trust that he will conduct himself in accordance with your sovereign pleasure and desire. . . .

The consent was repeated in a letter of 7 November 1575,[62] and Coiter departed on the expedition from which he was fated not to return. The documents consulted for this paper add nothing to our knowledge of the actual circumstances of his death, a death which, as Nuyens[63] and others

Tabulae externarum partium humani corporis . . . (Bologna, 1564): University of Glasgow Library; *Externarum et internarum principalium humani corporis partium tabulae . . .* (Nürnberg, 1573): Bibliothèque Nationale, Boston Medical Library, British Museum (2 copies), University of Glasgow Library, New York Academy of Medicine Library, University of Rochester Medical Library, Yale Medical Library; *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis . . .* (Nürnberg, 1575): Bibliothèque Nationale, British Museum (2 copies), New York Academy of Medicine Library, Yale Medical Library. Copies of the second item in the Army Medical Library, the Biblioteca Alessandrina at the University of Rome, and the Biblioteca Comunale in Bologna and of the *De ossibus et cartilaginibus humani corporis tabulae . . .* (Bologna, 1566) at the Biblioteca Angelica in Rome are also without such inscription. The Biblioteca Ambrosiana possessed before World War II a copy of the second item and apparently the portion "De quadripedum sceletis" of the *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis . . .* (Nürnberg, 1575); both were casualties of the bombing raids in Milan. Nuyens' *Catalogus librorum quos collegit Societas Neerlandica ad promovendam artem medicam* (Amsterdam, 1930) records copies of the *Tabulae externarum partium humani corporis . . .* (Bologna, 1564) and the *Externarum et internarum principalium humani corporis partium tabulae . . .* (Nürnberg, 1572). According to a letter from Nuyens to Dr. Harvey Cushing, written 2 November 1931 and now laid into the Cushing copy of this catalogue, Nuyens was already in 1931 busy on his biography of Coiter.

[58] Dr. George S. Keller of the Universitätsbibliothek in Würzburg has endeavored without success to furnish me with biographical information on Gaspar Weber. All sources at the Staatsarchiv in Würzburg relating to the bishop have been searched, but there is no mention of his secretary. I should like to express here my appreciation of this, the most recent of many courtesies on the part of Dr. Keller.

[59] Younger brother of Pfalzgraf Ludwig, whom Coiter had served in Amberg. See ADB, 1881, *14*, 307–314. His French campaigns, which had begun in 1567, are outlined there and in *Cambridge Modern History*, 1905, *3*, hereafter cited as CMH.

[60] Documents C.39, 40, 41. Cf. C.42, 43.

[61] Document D.1.

[62] Document D.2.

[63] Nuyens II, pp. 2658–2659. In this connection Coiter's contemporaries may have recalled the elegiac couplets on death which he had printed

have showed, resulted not from military action but from illness and occurred on 2 June 1576 when peace had been formally declared in France and the army was already returning to Germany.[64] They do, however, furnish a few melancholy details concerning the person most affected by his death. He left a widow Helena who was a foreigner. On her request she was granted permission to remain in Nürnberg two years longer without citizenship.[65] Payment of the still outstanding loan of 200 florins, which had been guaranteed to the council by Steffan Braun, was made the condition for a grant of 50 florins to her.[66]

The years passed, and Coiter's financial troubles were forgotten. In time the citizens of Nürnberg were unable to remember accurately the year of his death or the name of the Pfalzgraf with whom he served in France. But his reputation as physician and anatomist could not fade, and in a seventeenth century manuscript collection of inscriptions in honor of renowned representatives of Nürnberg the following tribute[67] to him is preserved in the city where he won his greatest fame:

Volcher Coiter, doctor of medicine, was born at Groningen in Friesland. Carried on by his natural inclinations to more advanced study in medicine, he became so well versed in it and in dissection that the eminent city of Nürnberg contracted for his services at a fair stipend. But a premature death removed this renowned anatomist much too quickly from our midst. For as camp physician he accompanied the expedition of Pfalzgraf Wolfgang[68] to France, hoping that, in view of the rich opportunities for dissecting, he might penetrate the mysteries of obscure diseases. But while he was engaged there in these activities, the eminent physician and surgeon in the year 1569 laid down his life, and with it his medical and anatomical skill.

on Plates III and IV respectively of his *Externarum et internarum principalium humani corporis partium tabulae:* "Mors scelerum Comes est, et certa triumphat in omnes:/ Dum rapit in leges nos truculenta suas./ Sed mortem supero quae venit ab aethere vita/ Morte sua domuit victima caesa deo," and "Aspice quam sis foedus, homo qui sidera tangis./ Vertice nec cristas desinis erigere./ Nam mors ipsa tuis, ut cernis, in ossibus haeret/ Quae merito reprimat dira tuos animos."

[64] In this campaign, according to CMH, pp. 29–30, Johann Casimir had entered France near Sédan early in January, 1576, with Condé and Méru. Marching rapidly through Champagne, Burgundy, and the Bourbonnais, they reached Vichy about the beginning of February and lay at Moulins till the end of March, whence the Huguenot demands were sent to the King in a memorial of 93 articles. Terms were agreed to on Easter Eve, 21 April, and ratified on 6 May by the Edict of Beaulieu. The summer was far advanced, however, before Johann Casimir and his troops left France.

[65] Documents C.46, 47.

[66] Document C.45.

[67] Document F. Portions of this document have been printed elsewhere, without identification.

[68] In the year 1562 a son of Joachim Camerarius the Elder was at the court of Pfalzgraf Wolfgang; see Camerarius, *op. cit.* [note 31], p. 86. In 1569, according to CMH, p. 12, Pfalzgraf Wolfgang, Duke of Zweibrücken (ADB, 1898, *44*, 76–87), came to the aid of the French Protestants with a powerful force of German troops. On 23 June they effected a junction at Saint Yrieix with Admiral de Coligny's forces. The Duke himself, however, had died a few days before, perhaps, as some thought, from overindulgence in the wines of southern France. It seems clear that the author of this inscription was confused by the somewhat parallel circumstances—Wolfgang and Coiter both participating in religious campaigns in France and both dying there—and mistakenly transferred Coiter's service from 1576 and Pfalzgraf Johann Casimir to 1569 and Pfalzgraf Wolfgang.

DOCUMENTS

A. Erlangen. Universitätsbibliothek. Briefsammlung Trew. Letters of Volcher Coiter to Joachim Camerarius the Younger (Schmidt-Herrling, p. 111).

1. Ornatissimo doctrina et experientia uiro Domino Joachimo Camerario iuniori medico et philosopho eximio domino suo plurimum obseruando. Zu Bamberg. Salutem dico. Si cum tuis, uir clarissime, uales, est quod laetemur. Nos de benignitate adhuc ualemus. Scies me tua praesentia magno dolore et incommodo carere. Cum autem ea frui nunc nequeam, per literas tecum colloqui ut in discessu petijsti, constitui. Scribam noua ad nostram artem pertinentia, quae intellectu forsan tibi non ingrata erunt. Te iam ex Doctoris Palm scriptis percepisse puto quidnam senatus noster nobis pestiferi huius morbi propellendi gratia iniunxerit, et quidnam definitum sit. Doctor Wolffius remediorum Paracelsorum infinitum numerum proposuit, at nullum in scripto senatui tradito annotatum fuit. Accessere ad nos empirici noui, qui podagrae curationem firmam constantemque pollicentur, et inter eos femina, quae (ut expiscari potui) oleum ex raris uiridibus conficit, quo breui tempore podagricos dolores aufert omnino. Fac, quaeso, si unquam de hoc quid intellexeris uel legeris, mihi perscribas. Ego etiam hoc oleum parabo. Anodinum credo ualde esse. Redijt noster monachus frater cancri, qui Doctorem Rockenbachium per cauteria curandum suscepit. Erastus uidetur ab illo deceptus, ut ex literis animaduertere potui. Hic Erastus mihi aliquoties scripsit et inter caetera Theophrasteos suis scriptis ualde offendi, et cum alia uia sese uindicare nequeant, illum Arrianismi insimulant. Adijcit et tertiam disputationum contra Paracelsi doctrinam partem, quam scribit multa praeclara atque utilia comprehendere, pene absolutam. Secundam partem puto iam ad tuas peruenisse manus. Mitto consilium pro Doctore Jugelio, at nec Erasti, nec meum sequitur, sed sororis, quae illi longe aliter decoctum ligni atque a Doctore Erasto praescriptum est praeparauit, nimirum cum ligno, radice tormentillae, corticibus ligni et salsa parillia. Quamuis hoc decoctum admodum improbare nequeam nihilo minus mihi quoquo modo displicet Doctorem Jugelium a praescripto Doctoris Erasti in primo curationis limine statim declinasse. At haec communis omnium hominum et praecipue doctorum uidetur esse consuetudo. Rogo autem te mihi ut primo tempore hoc consilium remittas. Ex tuis aegrotis consequutus sum Nobilis *** Friderici *** uxorem, quae tertiano morbo laborat, et iam quasi ad declinationem peruenit. Bremius pessime sese habuit, iam uero melius. Redit tamen dolor nonnunquam, sed remissius affligitur solito. Caput etiam grauedinem et nunc sentit. Ego illi suasi ligni guaiaci (cum salsa parillia decoctum). Adest enim, ut nouisti, intemperies ualde humida, cum manifesta frigiditate ad sensum coniuncta. Iocinoris caliditas non est tanta, ut decocti huius exhibitionem inhibere possit. Proposui et ei cauterium. Tuum de hac re expectamus consilium. Praeterea Wilibaldus in Hoff senior petijt, ut te interpellarem gratia sui filij iunioris, qui simili fere catharro, quo Eustachius Unterholtzen, laborat, sed ut huic tenuis et aquosus catharrus ad pectoris intimas, sic illi ad exteriores partes decidit. Occupat enim colli musculos et descendit inter cutim et musculos ad cartilaginem ensiformem. Usque laborat tussi sed maiori ex parte inani. Quod per tussim siue screatum expuit tenue aquosumque est, et aliquando spumosum, raro crassum, nonnunquam subacidum, raro uel nunquam salsum. Hunc catharrum sibi ex ingenti frigore quod in itineribus diuturnis hybernis temporibus passus est, item ex esu fructuum horariorum, ex potu copioso aquarum uel potionum pectoralium quas medici Italici illi tussis causa ordinarunt contraxit. Foueri hic catharrus uidetur a uentriculi debilitate et relaxatione. Ascita multo dulcium humidorum et frigidorum usu, praeterea ab hepatis intemperie calida sibi innata. Quod hoc ita sit attestatus

uomitus nonnunquam biliosus et alia multa quae tibi, cui eius parentumque natura satis perspecta est, ut enarrem superuacaneum esse iudico. Medici Itali cum suis usitatis remedijs mirum in modum excruciarunt. Existimabant catharrum esse salsum, et ob id frigidis incrassantibusque usi sunt, metuo ne magno id acciderit suo malo. Inditum ei fuit cauterium in altero brachio, cuius beneficio dolor ab altero faucium latere mediocriter cessauit. Ego ei praescripsi uictus rationem exsiccantem, et medicamentis purgantibus, deinde absque manifesta caliditate exsiccantibus usus sum, unde non parum fructus percepit, plus percepisset, si perseuerasset. Non cessante catharro parens uterque socer cum socru uehementer de me postularunt ut aliam instituerem curam tuumque peterem hac in re consilium. Equidem pollicitus sum me tibi scriptis meam sententiam aperire uelle. Et ut breuis sim, iudicavi a purgatione et sanguinis missione negotium auspicandum, deinde uel salsae parilliae decoctum cum pauca ligni portione, et quibusdam herbis capitalibus praeparatum ei exhibendum, uel ad acidulas Geppingenses ob ualidam qua praeditae sunt uim tum siccandi, tum roborandi cum angustia pectoris nulla adsit, ei proficiscendum opinatus sum. Quod si acidularum usu sese nimium refrigerasset, ut postremo sese in Cellensibus lauaret. Fac quaeso breuibus tuum exquisitum de hac ualetudine, quae ob contrarias partium principalium intemperies curatu non admodum facilis existit, iudicium mihi communices. Nouarum rerum nihil certi habemus. Senatus noster antiquo more se gerit aduersus nos. Iusiurandum a nobis, pharmacopolis et barbitonsoribus pro solito postulatum, seruatur ut ante. Deum oro, ut te cum tuis incolumem et saluum conseruet. Salutes meo nomine coniugem tuam dulcissimam et familiam. Vale. Anno 1572, 5 Maij. Tuus ex animo. Volcherus Coiter. (Figs. 1–3)

2. Clarissimo philosopho ac medico Domino Joachimo Camerario juniori Noribergensium physico domino et amico suo obseruanter colendo. Zu Bamberg. Salutem dico, clarissime domine doctor. Cum hactenus nihil scriptum dignum habuerim, nihil scripsi. Nunc uero allatis quibusdam nouis Francoforto et oblata per hunc laborem scribendi occasione omittere nolui quin aliquid darem. Scies me in aedibus tuis fuisse et res tuas satis saluas reperisse. Valent et tui amici. Noua ex schedula inclusa intelliges. His cum tuis in Christo foeliciter uale. Datum Noribergae anno 1573, 22 Septembris. Tuus tuus Volcherus Coiter. (Fig. 4)

3. Dem erwürsten vnnd hochgelerten Herrn Joachimo Camerario der Artzeneyen Doctor vnnd der Stadt Nürnberg physico meinem günstigen lieben Herrn vnnd Freundt. Zu Bamberg. Salutem dico. Noua, quae ex sermonibus aliorum corradere potui, ut me facturum pollicitus sum, clarissime domine doctor, tibi mitto. Praeter haec quod tibi communicem nihil habeo. Tui adhuc recte ualent. Die solis praeterita nos una fuimus in aedibus Domini Areri collegij instituendi gratia et uno consensu tuum approbauimus consilium. Hoc tamen adijciendum duximus, duos senatores constitutos iri, qui postulata nostra exequerentur, et si quid grauius accideret, id nostro nomine ad totum senatum deferrent. Ita enim putauimus fore ut molestia supplicandi, si quid senatui referendum foret, subleuaremur. Haec hodie senatui a Doctore Arero et Wolffio indicata sunt. Praeter haec nihil. Vale cum tuis. Noribergae. Anno 1573. 17 Octobris. Tuus tuus Volcherus Coiter. (Fig. 5)

B. Erlangen. Universitätsbibliothek. Volcher Coiter, *Externarum et internarum principalium humani corporis partium tabulae* . . . (Nürnberg, 1572). Title page. (Fig. 6)

Prudentissimo uiro Domino Christoforo Cressio senatori Noribergensi domino suo cum obseruantia colendo autor dat dicat.

C. Nürnberg. Staatsarchiv. Ratsverlässe, nos.1309–1405.

1. No.1309, f.6. 1. November 1569. Herrn D. Volcker Koyter sol man zum Aufzug noch 25. f. verehrn. H. J. Schürstab.

2. No.1323, f.30. 2. Dezember 1570. Auf Herrn D. Volckern Koyters Clag, wie ungeschickt unt betrohlich sich Michel Holer Barbierer gegen im erzeigt: sol man bede Theil gegeneinander hern und den Holer behaurn. Widerpringen. M. Tucher.

3. No.1323, f.32. 4. Dezember 1570. Michel Holder, den Barbierer, sol man uf Herrn D. Volckers furbit mit einer ernstlichen streflichen rede abgeen lassen. M. Tucher.

4. No.1324, f.9b. 14. Dezember 1570. Herrn D. Volcker sol man gein Amberg 6 tag urlauben. Burgermeister juniores.

5. No.1326, f.28b. 19. Februar 1571. Cossmussen Khin, dem Rotschmidt, so zum Steinpuehl gefangen, sol man uf sein bekante diebstal uf kunftigen Donnersstag ein ernstlichen peinlichen Rechtstag ansagen. Und ine Herrn D. Köyter besichtigen lassen, ob er zum anatomiren tuglich. Schöpfen.

6. No.1327, f.11. 10. März 1571. D. Volcker Koyter sol man 8 tag gein Bamberg erlauben. H. G. Nützel.

7. No.1327, f.19b. 16. März 1571. D. Volcker Koyter sol man zu dem Pflugen gein Aurbach erlauben. Burgermeister juniores.

8. No.1330, f.18. 28. Mai 1571. D. Volcker Koyter sol man zu lassen die Margret Fuxin nach volprachter straf zu anatomirn. Burgermeister juniores.

9. No.1330, f.33b. 6. Juni 1571. Auf Volcker Koyters verlesener supplication, wie die Barbierer den Patienten also Erznei in leib geben, sol man die ordnung zur hand suchen und neben ime heren Doctor und etlichen andern medicis beratschlagen, wie besserung furzunemen. H. J. Geuder. C. Führer.

9^{bis}. No.1331, f.4. 15. Juni 1571. Dieweil sich D. Volcker beschwert Hannsen Ritter weiter zu curirn, dieweil im Bartel Zymmermann apoteker auch eingeben, sol man ine Zymmermann beschikken zu rede halten, was er im geben. H. Ebner.

10. No.1331, f.10. 19. Juni 1571. D. Volcker Koyter gein Bamberg zu Johann Philip von Seckendorf erlauben. H. G. Nützel.

11. No.1331, f.27. 2. Juli 1571. Johann Phlipp von Seckendorf sol man auf sein schreiben an Herrn Gabriel Nützel D. Volckern erlaubnus zu erlengen, das er wochenlich 2 tag zu im gein Vorchheim reiten mecht: Sol man ime solchs beschwern und schreiben, das es im am besten, das er sich hieher begebe. Aber man wolt im doch mit ofner Hand erlauben D. Volcker auch sagen ine zu persuadiren sich hieher zu begeben. H. G. Nützel.

12. No.1331, f.36. 7. Juli 1571. Auf Herrn Johann Philipsen von Seckendorfs pitlich begern sol man D. Volcker zu lassen mit ofner Hand wochenlich 1 tag gein Vorchheim zu im erlauben. G. B. Nützel.

13. No.1331, f.38. 9. Juli 1571. Mathes Leitkirchner den Bader sol man 3 tag auf ein thurn strafen und D. Volcker sein sag lesen lassen. C. Führer.

14. No.1333. 30. August 1571. M. Franntz Renners Erzneibuch sol man D. Volcker besichtigen lassen. H. G. Nützel.

15. No.1335, f.1. 4. Oktober 1571. D. Volcker Koyter sol man 8 tag zum Thumbprobsten von Bamberg gein Wirzburg erlauben. H. G. Nützel.

16. No.1344, f.4. 6. Juni 1572. Auf des Herrn Teutschmeisters an Herrn Gabriel Nützel gethanes schreiben sol man D. Volcker Koyter uf 14 Tag wieder zu sein f. g. vergonnen. H. G. Nützel.

17. No.1348, f.21b. 17. Oktober 1572. D. Volcker Koyter zu dem von Zedtwitz, Amptman zu Vilseck erlauben. W. Rummel.

18. No.1349, f.28b. 17. November 1572. D. Volcker Koyters Buch von der Anotomia, das er mein herrn dedicirt, sol man die andern medicos sehen lassen und von inen vernemen, was im zu verehrn. H. J. Volckhamer.

19. No.1350, f.31b. 8. Dezember 1572. Dem Amptmann zu Herzogenaurach uf sein schreiben D. Volcker vergonnen. H. G. Nützel.

20. No.1353, f.7b. 17. Februar 1573. Auf der Herrn Doctorn der Arzney verlesene supplication inen zu gestatten ein Collegium under inen aufzurichten, solchs auch zu confirmirn, sol man inen herrn D. Camerarii gemacht Buch allerlei guter ordnungen halben zu haus schicken. Darnach zusammen erfordern, einen einhelligen Ratschlag von inen einehmen, wie solch Buch in einem und andern Punkten zu bessern oder wie es ins Werck zu richten, und demnach D. Volcker Koyter auch ein Buch von der Anatomia ainem erbarn Rathe ubergeben, sol man gleichfalls ir bedencken daruber einehmen und alles widerpringen. M. Tucher. S. Baumbgartner.

21. No.1353, f.12. 21. February 1573. D. Volcker Koyter zu Michl Welckners weib gein Grefenberg erlauben. Burgermeister juniores.

22. No.1353. Dieweil herr D. Volcker vermeldt, das Michl Wolckers weib gewisslich des falls gestorben, sol man die sach ruhen lassen, biss des herrn D. diner kumbt. P. Grundherr.

23. No.1353, f.34b. 10. März 1573. Auf D. Volcker Koyters verlesene supplication und anzeig, das er vorhabens in seiner kunst der anatomia mehr bücher in truck ausgeen zu lassen und diselb kunst also an tag zu geben, das es den Barbirern und Wundarzten mercklichen nutz pringe. sol man sich erkundigen, ob dergleichen bücher hivor mehr aussgangen, wie er vorhatt. S. Baumbgartner.

24. No.1357, f.29b. 16. Juni 1573. Auf Pfalzgraf Ludtwigen Stathalters zu Amberg pitlichs schreiben sol man D. Volcker Koyter zu sein f. g. erlauben. T. Tucher.

25. No.1357, f.33. 17. Juni 1573. Nachdem angebracht worden, das Herr Doctor Volckart Koyter ein buch, die observationes anatomicas intitulirt, kurtz verschiner Zeit, meinen Herrn, aim E. Rhat, dedicirt, und mit den figuren, die in kupfer gestochen ein grossen costen aufgewendt, derhalben im noch nichts verehrt worden; daneben, das er im werck wer noch ein buch zu fertigen von den musculis und nervis, allain weil er die verlag nit het, das er bät ime 300 fl. uf zway iar lang uf gnugsam caution zu statten kummen. Die andern herrn doctores medicinae auch das von ime gefertigt buch nit ubel belobten, dieweil sie sein vleis darin befunden, wie dann ir derhalb gestellt iudicium ausweise unzweyvenlich, er wurde es im vorhabenden werck nit minder thun. Ist verlassen, ime doctor Koyter 200 fl. on Interesse uf zway jar lang uf gepurliche versicherung furzuleyhen und zu end derselben zeit der verehrung halb obgedachts buchs rhätig werden. Hieronimus Baumgartner.

26. No.1358, f.41b. 13. Juli 1573. H. Doctor Volckhart Coiter soll man acht tag gern Arnstat erlauben. Burgermaister juniores.

27. No.1360, f.1. 13. August 1573. Auf herrn Friderichen Bischofen zu Wirzburg schreiben sol man D. Volcker Koyter zu sein f.g. erlauben. Weil sich aber Meister Frantz Renner der Wundarzt seiner schwacheit und pacienten halb entschuldigt, sol man im sagen sich gegen sein f.g. selbs zu entschuldigen und solchs dem herrn Bischof auch zu schreiben. Burgermeister juniores.

28. No.1372, f.10b. 12. Juli 1574. Herrn doctor Volckart Coiter soll man sechs tag zum Landtgrafen von Leichtenberg gen Pfreimbd vergunnen, doch sagen, seine

pacienten zuvor dermassen zu versehen, damit in seinem abwesen nicht klag oder mangel erscheine. Burgermeister juniores.

29. No.1374, f.5. 4. September 1574. Dieweil die vergraben Menschenhaut D. Volcker Koyter zustendig gewest, sol mans wider vergraben lassen, doch ime sagen hinfüro on meiner herrn wissen keine mehr vergraben lassen. Ulrich Starck.

30. No.1376, f.8b. 2. November 1574. D. Volckero Koyter sol man zu herrn D. Ulrichen Sitzinger erlauben. H. G. Nützel.

31. No.1378, f.26. 5. Januar 1575. D. Volckhardt Koyter zum Rentmeister gein Amberg urlauben. Burgermeister juniores.

32. No. 1379, f.8b. 25. Januar 1575. D. Volcker Koyter sol man zum Burggrafen zum Rotenberg erlauben. Burgermeister juniores.

33. No.1382, f.20. 19. April 1575. Die verlesen urthl an Veiten Prendel von Speikern dem Meltzer und Jorgen Schindel von Bairreut dem Dieb heut publiern und exequirn lassen. Herrn D. Volckart Koyter vergonnen ine zu anatomirn und dem Nachrichter das schmaln zu lassen. Schöpfen.

34. No.1383, f.25. 24. Mai 1575. D. Volcker Koyter zum Dechant gein Forchheim erlauben. Burgermeister juniores.

35. No.1383, f.30. 28. Mai 1575. Auf Heinrichen Dolpen Dechants zu Forchheim schreiben sol man D. Volcker Koiter erlauben ine zu curirn. Burgermeister juniores.

36. No.1385, f.29. 20. Juli 1575. D. Volcker Koyter sol man zu herrn Andre Mussman gein Onolzbach erlauben. Burgermeister juniores.

37. No.1385, f.43. 25. Juli 1575. D. Volcker Koyter sol man fur seine zwei dedicirte bucher de anatomia 50 fl. verehrn. H. J. Baumbgartner.

38. No.1388, f.33. 13. Oktober 1575. Auf den widergebrachten bericht, wie es mit Hansen Chanlers schwachait geschaffen, soll man ime D. Volcker Coiter zuordnen, purgiern und zu adern lassen. V. H. Starck.

39. No.1389, f.2. 21. Oktober 1575. Auf Pfalzgraf Johann Casimirs schreiben und pitlichs begern D. Volcker Koyter unabbruchig seiner besoldung zu vergonnen mit irer f. g. ein zug zu thun etc., sol man ine D. Volcker horn, was sein gelegenheit, und ob er darzu genaigt. P. Harssdorfer.

40. No.1389, Anhang, f.1. 22. Oktober 1575. Auf herrn Johann Casimirs Pfalzgrafen schreiben herrn D. Volckhart Koyter zu erlauben, das er mit sein f. g. einen zug thue; weil gemelter herr D. solchs vermug seiner schriftlichen anzeig bewilligt, sol man im erlauben und solches dem Pfalzgrafen wieder zuschreiben. P. Harsdorfer, Ratschreiber.

41. No.1389, f.9b. 26. Oktober 1575. Auf Herrn Johann Casimir Pfalzgrafen schreiben und nochmaln bescheen pitlichs begern D. Volcker Koyter zu erlauben den Zug mit sein f. g. in Franckreich zu thun, und sein f. g. fur iren leib ein gut ross verehrn. Ist erteilt, weil D. Koyter albereit erlaubt sol mans dabei pleiben lassen und nach eim guten ross fur sein f. g. trachten. H. G. Rieter.

42. No.1389, f.11. 27. Oktober 1575. Auf Andre Epellein vogtes zu Marck Erlbach schreiben, wesgestalt ein pot uf der hart zwischen Wilhelmsdorf und Erlbach erschossen mit zusendung der brief, so bei im gefunden. Weil sich find, das es ein Speirischer pot gewest, sol man D. Volcker Koiter das schreiben an Pfalzgraf Johann Casimir seiner urlaubung halb und den andern burgern die iren zustellen. Ratschreiber.

43. No.1389, f.26b. 7. November 1575. Pfalzgraf Johann Casimir Danckbrieflein von wegen D. Volckart Koyters ruhen lassen. Ratschreiber.

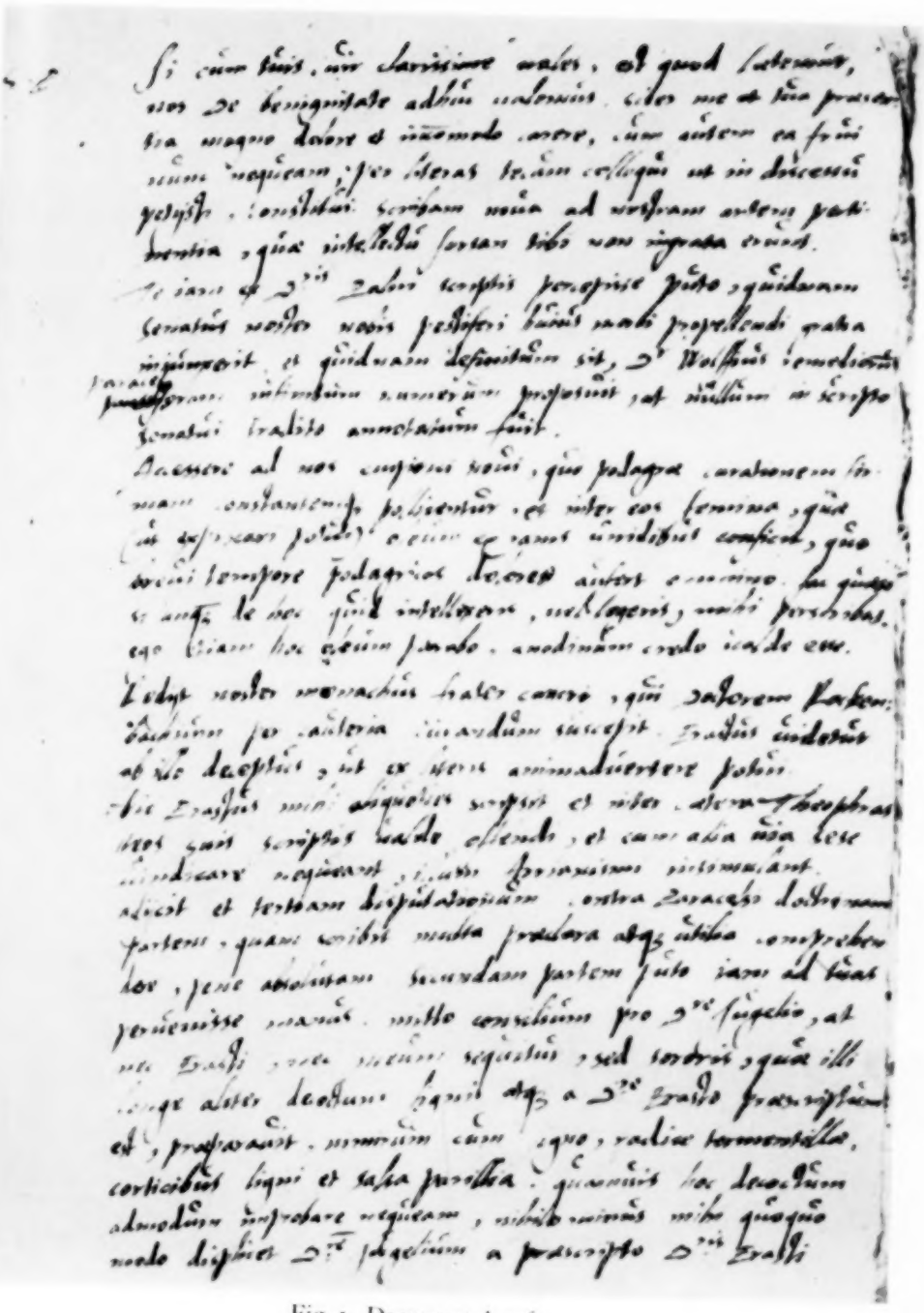


Fig. 1. Document A.1, f.1
Courtesy Universitätsbibliothek Erlangen

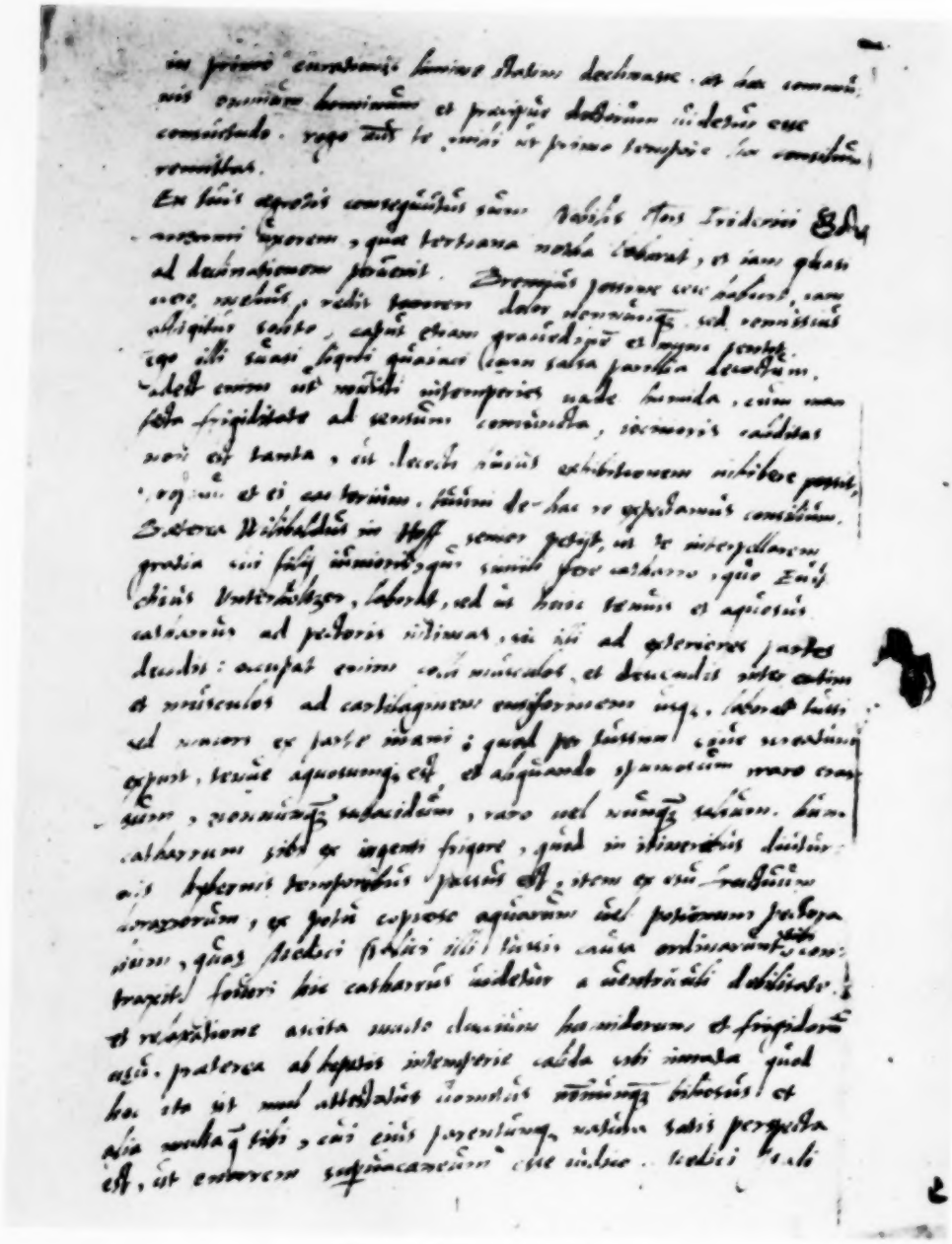


Fig. 2. Document A.1, f.2
Courtesy Universitätsbibliothek Erlangen

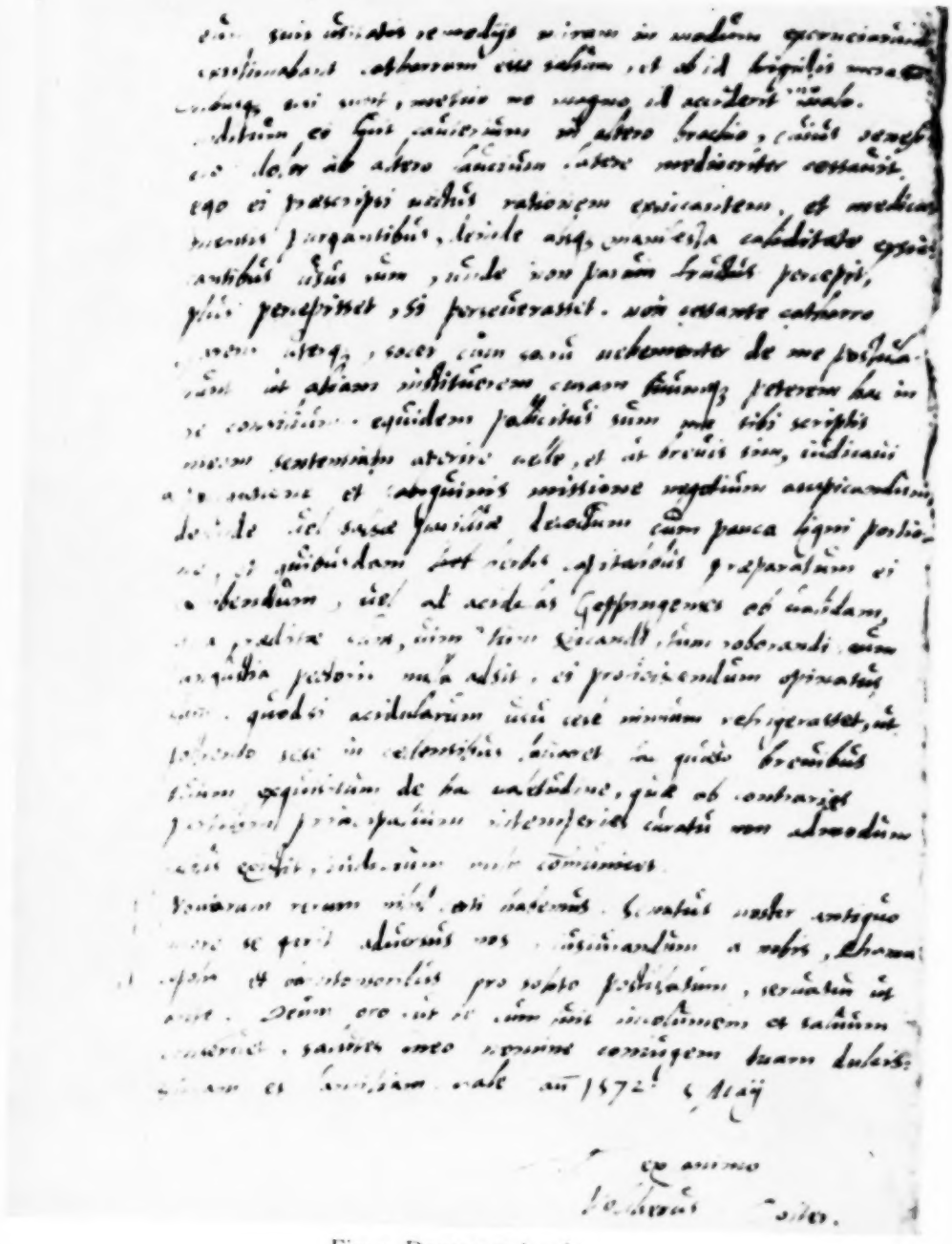
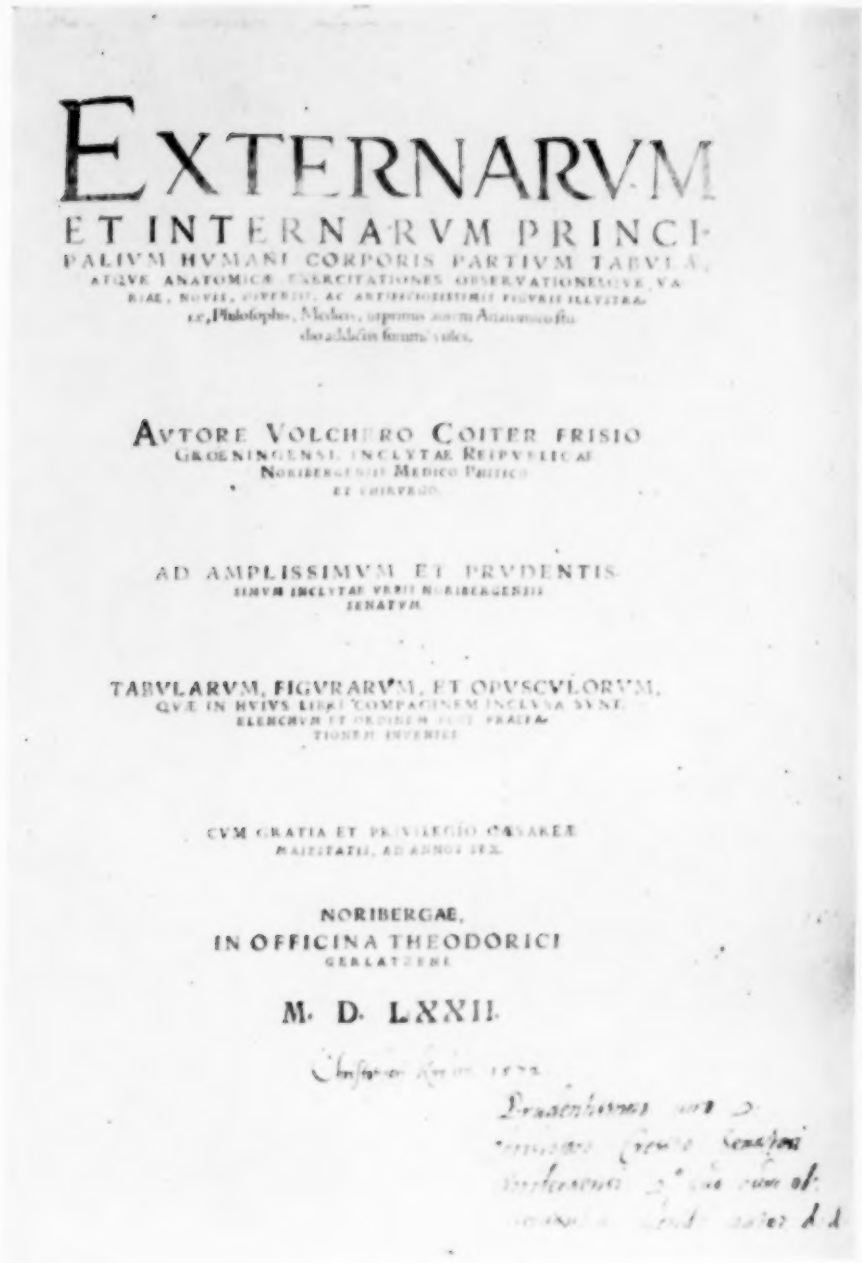


Fig. 3. Document A.1, f.3
Courtesy Universitätsbibliothek Erlangen

Fig. 4. Document A.2
Courtesy Universitätsbibliothek Erlangen

Fig. 5. Document A.3
Courtesy Universitätsbibliothek Erlangen



EXTERNARVM
ET INTERNARVM PRINCI-
PALIVM HVMANI CORPORIS PARTIVM TABVLÆ,
ATQVE ANATOMICÆ EXERCITATIONES OBSERVATIONESQVE VA-
RIÆ, NOVIS, ELEGANTIBVS, AC ARTIFICIOSISSIMIS FIGVRIS ILLVSTRA-
TÆ, Philosopho, Medico, utrumq; autem Anatomico stu-
diosæ adiectis locupletissimis indicibus.

AVTORE VOLCHERO COITER FRISIO
GRONINGENSI, INCLYTAE REIPVBLICAE
NORIBERGENSIS MEDICO PRACTICO
ET CHIRVRGO.

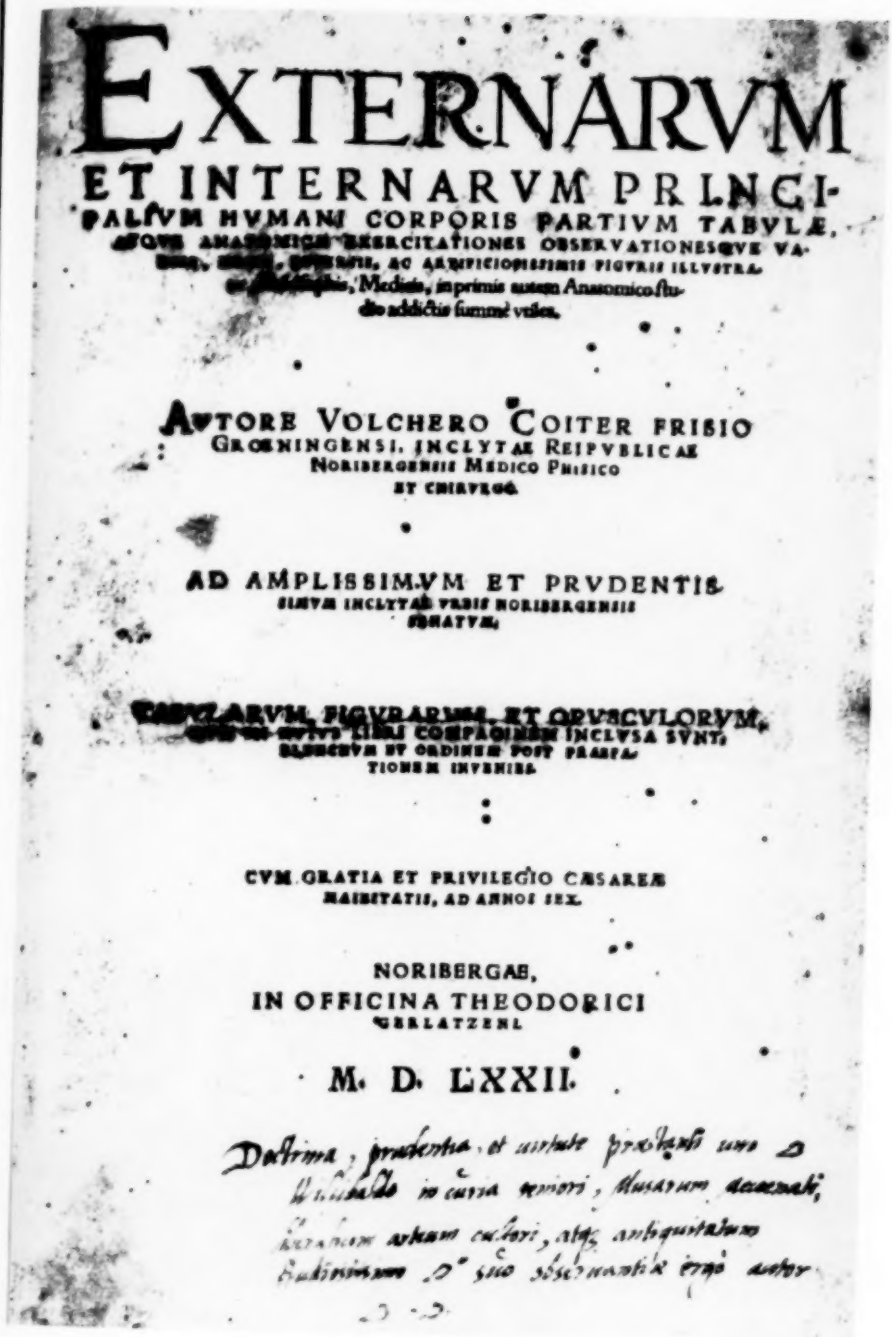
AD AMPLISSIMVM ET PRVDENTIS-
SIMVM INCLYTAE VRBIS NORIBERGENSIS
SENATVM.

TABVLARVM, FIGVRARVM, ET OPVSCVLORVM,
QVÆ IN HVIVS LIBRI COMPAGINEM INCLVSA SVNT,
ELENCHVS ET ORDINEM SUIS PRAELA-
TIONIBVS INSERITUS.

CVM GRATIA ET PRIVILEGIO CAESAREÆ
MAIESTATIS, AD ANNOS DECEM.

NORIBERGAE,
IN OFFICINA THEODORICI
GERLATZENI
M. D. LXXII.

Fig. 6. Document B
Courtesy Universitätsbibliothek Erlangen



EXTERNARVM

ET INTERNARVM PRINCI-

PALIVM HVMANI CORPORIS PARTIVM TABVLÆ,

QVIBVS ANATOMICÆ EXERCITATIONES OBSERVATIONESQVE VA-

RIÆ, NOVÆ, ADMIRANDÆ, AC ARTIFICIOSISSIMIS FIGVRIS ILLVSTRA-

NTVR Philosophis, Medicis, in primis autem Anatomico studio addictis summè vtiles.

AVTORE VOLCHERO COITER FRISIO

GRONINGENSI, INCLYTÆ REIPVBLICÆ

NORIBERGENSIS MEDICO PHISICO

ET CHIRVRGO.

AD AMPLISSIMVM ET PRVDENTIS

SIMVM INCLYTÆ VRBIS NORIBERGENSIS

SENATVM.

TABVLARVM, FIGVRARVMQ. ET ORVSCVLORVM,

QVIBVS HVIVS LIBRI COMPAGINEM INCLVSA SVNT,

EXPLICATIO ET ORDINEM POST PRÆFA-

TIONEM INVENIES.

CVM GRATIA ET PRIVILEGIO CÆSAREÆ

MAIESTATIS, AD ANNOS SEX.

NORIBERGÆ,

IN OFFICINA THEODORICI

GERLATZENI.

M. D. LXXII.

Doctrina, prudentia, et virtute præstanti viro D. Wilibaldo in curia nostri, Illustrium decanali, Patauium urbem ciuitati, atq; antiquitatum studiosissimo D. suo obseruantiæ ergò autor

Fig. 7. Document H
Courtesy The Royal Society

LECTIONES GABRIELIS FALLOPII

DE PARTIBVS SIMILARIBVS

HVMANI CÔRPORIS, EX DIVERSIS EXEMPLARI
BVS A VOLCHERO COITER SVMMA CVM
DILIGENTIA COLLECTAE.

HIS ACCESSERE DIVER-
SORVM ANIMALIVM SCELETORVM EXPLICA-
TIONES ICONIBVS ARTIFICIOSIS, ET GENVINIS ILLVSTRATAE,
quæ omnia loco appendicis Anatomicarum exercitationum prius edita-
rum, Anatomiæ & Philosophiæ naturalis studiosis in-
seruire vtiliter poterunt.

AVTORE EODEM VOLCHERO COITER FRI-
SIO GROENINGENSI, INCLYTÆ REIPVBLICÆ
NORIBERGENSIS MEDICO PHYSICO
ET CHIRVRGO.

Ad Amplissimum & Prudentissimum inclytæ vrbis
Noribergensis Senatum.

CVM GRATIA ET PRIVILEGIO CÆSAREÆ
MAIESTATIS, AD ANNOS SEX.

NORIBERGÆ
IN OFFICINA THEODO-
RICI GERLACHII

M. D. LXXV.

Fig. 8. Document I
Courtesy Army Medical Library

44. No.1389, f.44. 15. November 1575. Als herr Doctor Volcker Coiter bei meinen herren ansuchen und pitten lassen ime die 200 fl., die er meinen herren schuldig und im Julio jüngst verfallen sein, von derselben Zeit an noch auf zwai oder wenigsten auf ain jar zu prorogieren, soll man ime gegen gepurliche purgschaft, so er die laisten wurdet, auf ein jar daryn willfaren. Baumgartner.

45. No.1402, f.48. 5. November 1576. Auf den wiedergebrachten bericht, welcher gestalt ein erber Rath herren Doctor Volcker Coiter seligen vor aim jar erlaubt haben mit herren Johann Casimiro Pfalzgrafen bei Rein in Franckreich zu ziehen und wie es mit den zweinhundert gulden, die ire erberkeiten gedachtem herrn doctor furgeliehen, geschaffen, was massen dieselben durch Steffan Braun burgern hie verpurgt und jetzt omnium sanctorum fellig worden seien. Ist erteilt: Wiewol man gedachtem herren doctor sein besoldung die Zeit seines abwesens zu pessern nit schuldig, wie es ime auch, ob ers wol begert, nicht vertröst worden; jedoch hochgedachtem Pfalzgrafen zu underthenigen ehren, wovern die 200 fl. betzalt werden, soll man Helena seiner nachgelassenen wittib 50 fl. zur abfertigung verehren, in massen dann sein besoldung bis auf die zeit seines absterbens ungeverlich ein solches belauffen wirde.

46. No.1403, f.14. 15. November 1576. Der supplicirenden Helena herrn Doctor Volcker Coiters seliger nachgelassener wittib soll man zwai jar lang alhie one das burgerrecht zu sitzen vergunnen. J. Pömer.

47. No.1405, f.35. 17. Januar 1577. [In a list of people living in Nürnberg without citizenship but owning their homes] Frauen Helena Doctor Volcker Coiters seligen nachgelassene Wittib.

C bis. Nürnberg. Staatsarchiv. Verlässe zum Losungsamt, Bd.I, f.86.

Volcherus Coeiter medicus ist zu einem leibartzt bestelt und angenomen uff 5 jar, ein iedes umb 100 fl. zu 4 quartalen zu zallen und ist die zeit angangen adj. 6. October anno 1569, wirt sich enden uff 6. October anno 1574 und ist im zu eim aufzug und leykauf verhert worden thut 50 fl. actum per Jheronimus Schürstab, adj 20 July anno 1569.

Adj primo Novembris anno ut supra, als er d. an gemelten 50 fl. nit gesettigt sein wollen, sint im noch 25 fl. verhertt worden.

Adj 21. Jenner anno 75 ist gemelter doctor widerum uff 3 jar allermassen, wie oben vermelt, bestellt worden, die sich enden werden primo Octobris anno 77, angesagt per herrn Gabriel Nützel adj. ditto. nota: Es ist im dis mals ein leikauf verert worden.

[The entire entry is crossed out, and in the margin is drawn a cross as symbol that the person in question has died.]

D. Nürnberg. Staatsarchiv. Brief Buch No. 191.

1. f.29b. Herrn Johanns Casimirn Pfalzgraven bey Rhein, Herzogen in Bairn. Gnediger herr! Euer fürstlich gnaden schreiben und gnedigs ersuchen und begern den hochgelerten herrn Volckerum Coiter, unsern medicum und chirurgum, belangend, haben wir in untertenigkeit vernommen und ungeacht, das wir unser burgerschaft halben gemelts herrn doctor wol selbsten notturftig weren, so haben wir doch euer fürstlich gnaden zu untertenigem gefallen und willfarung ime vergönnt und zugelassen euer fürstlich gnaden in furgenommenen irem zug zu dienen, des versehens, er werde sich zur gebur und euer fürstlich gnaden gnedigem gefallen verhalten; dann euer fürstlich gnaden untertenige dienst zu erzaigen seind wir willig und habens euer fürstlich gnaden zu unterteniger antwort unverhalten lassen wöllen. Datum Sambstags, den 22. Octobris 1575.

2. f.40. Herrn Johannes Casimirn Pfalzgraven bey Rhein, Herzogen in Bairn etc. Gnediger herr! Euer fürstlich gnaden anderweit schreiben und gnedigs begern uns bey gegenwertigem irem diener zugesandt ist uns wol uberantwurt worden. Sovil nun unsern phisicum herrn doctor Volckerum Coiter belangt, haben wir denselben euer fürstlich gnaden begern gemes alberait erlaubnus getan, inmassen euer fürstlich gnaden one zweivel vor diesem aus unser untertenigen antwort vernommen haben werden. . . . [The remainder of the letter does not bear on Coiter.] Datum Montags, 7. Novembris 1575.

E. Nürnberg. Staatsarchiv. Stadtrechnungen no.30, f.206b.

[Under "Sold der erbarn diener"]

D. Volcherus Coieter

Item A dy primo May anno 1570	25 fl.
Item A dy primo Augusty	25 fl.
Item A dy primo November	25 fl.
Item A dy primo Februer anno 1571	25 fl.

F. Nürnberg. Staatsarchiv. Nürnberger Handschriften, no.315, f.410.

Volcherus Coiterus, Medicinae Doctor, Groningae apud Frisios natus, cum naturae stimulis ad Medicinam elegantiorem ferretur, adeo feliciter in artis ipsius studio et Anatomiae exercitio versatus est, ut operam eius inclyta Norimbergensium Respublica honesto stipendio conduxerit. Sed Anatomicum celeberrimum immatura mors nobis cito nimis subtraxit. Gallicanam enim expeditionem sequutus Castrensis Medicus factus est D. Wolfangi, Comitis Palatini Rheni, ut corporum dissecandorum occasione abstrusorum morborum abdita et intima penetralia cognosceret. Ibi dum agit, vitam cum artis Medicae et Anatomicae jactura posuit, Medicus et Chirurgus felicissimus. Anno Christi. MDLXIX.

G. London. British Museum. Volcher Coiter, *De ossibus et cartilaginibus humani corporis tabulae*. . . . (Bologna, 1566). Title page.

Erudito ac humanissimo uiro Magistro Gaspar Weber illustrissimo ac reuerendi episcopi Wirzeburg secretario dignissimo singularis amoris gratia tabularum author anno [15]70 *** *** Volcherus Citerus medicus *** *** *** ***

H. London. The Royal Society. Volcher Coiter, *Externarum et internarum humani corporis partium tabulae*. . . . (Nürnberg, 1572). Title page. (Fig. 7)

Doctrina, prudentia, et uirtute praestanti uiro Domino Willibaldo in curia seniori, Musarum Mecoenati, liberalium artium cultori, atque antiquitatum studiosissimo domino suo obseruantiae ergo autor dat dicat.

I. Washington. Army Medical Library. Volcher Coiter, *Lectiones Gabrielis Fallopii de partibus similaribus humani corporis*. . . . (Nürnberg, 1575). Title page. (Fig. 8)

Ornatissimo viro, eruditione, prudentia, virtute, et generis antiquitate praestanti, Domino Christophoro Cressio domino et patrono suo obseruando huius libri autor dat dicat.

Tomás Romay and the Yellow Fever

J. LÓPEZ SÁNCHEZ*

AMONG the epidemics which scourged the island of Cuba, the one which brought death to the greatest number of victims and thus the biggest horror to visitors, as well as being responsible for our slow progress, was the Black Vomit. As Picaza says,[1] comparing the black plague to the yellow fever, the former appeared riding on a giant black horse and the latter on a yellow one, bringing death to sailors or those who dared to cross the ocean. Socially, its evaluation is rather complex, as on one hand it often impeded our progress by converting our regions into inhospitable territories whilst on the other hand it became an ally to the arms which fought for our independence.

Although its origin is not exactly known, we have to admit that the American continent was a permanent focus radiating epidemic germs to Europe for four centuries. And more than that, according to Dr. Montoro,[2] the discovery of the sylvatic yellow fever in the South American continent and the absence of any important focus in Africa or other places confirms once more the theory of the American origin of this terrible disease. One of the chief advocates of this theory was Finlay, who based his affirmations on historic fact.

Who would ever have guessed that our whole medical history would be centered upon this scourge? It was the start of our medical bibliography; it gave a scientific character to our medicine—it was studied and written about for the first time by Dr. Tomás Romay, and it later gave the world a genius, our countryman Dr. Carlos Finlay. Now we can say as did Petrarch referring to the black pest: "Oh happy posterity which will not have to undergo such horrible sufferings, and which will make our testimony appear a fiction."

Although the Island had already suffered many epidemics of the yellow fever, the first one registered indelibly in our medical history was the one which broke out in 1794, probably because at that time, thanks to the influence of Romay, our medicine had developed to an extent that permitted observation of its symptoms, as well as experimentation with preservative and curative treatments.

On June 9, 1794, after having carried out a military expedition against

* Havana, Cuba.

[1] Picaza, S. Historia de la fiebre amarilla. (Inédito)

[2] Montoro, O. La influencia de Romay en la medicina cubana. (Inédito)

Santo Domingo, as part of the campaign by Spain in the war against revolutionary France, the squadron commanded by Lt. General D. Gabriel de Aristizabal cast anchor in Havana to repair its damaged ships, bringing the germs of the epidemic. The disease soon found a medium of fertile extension, attacking mercilessly the crews of the ships led by D. José Varela Ulloa, who had come from Cadiz to reinforce the protection of the Antilles. According to Pezuela these crews, not yet acclimatized and infected by cutaneous diseases and miseries, unfortunately collected in the harbor at the most critical stage of the epidemic. Of over 1,700 sailors and troops, barely 800 were left by autumn, the vomit having caused their death.[3]

One year earlier, the vomit, or yellow fever, had turned up in several cities of the United States, excellent descriptions of which were written by Carey and Rush, especially about the epidemic in Philadelphia. Holliday maintains it broke out aboard Lord Stanley's ship, guided by Farquhar and loaded with Negroes, that arrived in Havana in June 1794.[4] Romay maintains that the epidemic started after the arrival of the ship which came from Ocoa and Bayaha, and that a great number of the sick had died of the black vomit even before entering the Havana harbor, having touched the Northern Colonies en route.[5]

This epidemic proved so violent and reached such proportions that the limited hospital resources proved to be insufficient, and it became necessary to adapt different places for this purpose and to call for physicians immediately to relieve, as far as possible, the ravages of the disease. Romay was among the first who responded to this call. Being in charge of a ward of the Marine Hospital of the Arsenal, where most of the patients were hospitalized, he had a magnificent opportunity to study thoroughly the different forms of the disease, deriving most important experience concerning its development and treatments to be applied.

On April 5, 1797, at a meeting of the "Sociedad Patriótica de Amigos del País," Romay read his *Disertación sobre la fiebre maligna, llamada vulgarmente Vómito Negro, enfermedad epidémica de las Indias Occidentales,* thus inaugurating the scientific medical literature of our island. This precious cornerstone of Cuban medical history has a particular significance as it is at the same time one of the best monographs on yellow fever in that period.[6]

[3] Pezuela, J. de la. *Historia de la Isla de Cuba,* Madrid, 1868, vol. 3, pp. 251–252.

[4] Holliday, J. *A short account of the origin, symptoms, and most approved method of treating the putrid bilious yellow fever,* Boston, 1796.

[5] Romay, T. *Disertación sobre la fiebre maligna,* Habana, 1797, p. 4.

[6] Romay, *loc. cit.* His dissertation on yellow

It is not, as Delmonte and Costales have said, "the first one published in our language," since some Spanish physicians had written about their experiences in this field, describing different epidemics of yellow fever in their peninsula. In 1730, the year in which Pintado's army had gone through this "terrible pestilence," the physician of that squadron, D. Juan José de Gastelbondo, made some observations on the subject and in 1753 he wrote his *Tratado del método curativo y experimentado de la enfermedad de Vómito Negro epidémica y frecuente en los puertos de las Indias Occidentales.* In 1741, both Malaga and Cadiz suffered the same plague, which is said to have been brought over by some travellers from America. On this occasion the following dissertations were published: *Crisis epidémica que se padeció en Malaga en 1741* by D. Nicolás Francisco Roxano; *Análisis médico de la epidemia que se padeció en Malaga* by D. Antonio Rubio, and *Sinopsis crítico-médica sobre la epidemia que padeció la ilustre ciudad de Málaga, año de 1741,* by D. Francisco Reyes Sahagún, although the latter was written from secondary sources, its author having been absent from Malaga during the aforementioned epidemic, and not having treated or seen any of those attacked by yellow fever.[7] Dissertations dealing with this epidemic were also written by Juan Diaz Salgado (in 1756), D. José Masdevall (1785–1786), D. Cristobal Cubillas (in 1784), and D. Francisco Sobral.[8]

However, Romay's monograph was the first one published and read in Cuba; the only one that might have challenged this honor was that written by an English surgeon, John Holliday, whose qualification was certified before the Medical Board and who resided in Havana during the epidemic, yet it was neither read before the "Sociedad Patriótica" nor published. To prove this it is necessary to present the facts as taken from the Book of Agreements and from handwritten and unpublished transactions and minutes of the different meetings held by this Society at that time.[9] These are as follows:

The 10th of March, 1796, the Director of the Sociedad Económica introduced an essay which had been submitted to him by the surgeon D. Juan Holiday, referring to a new curative method of the disease known as Black Vomit, and after the intro-

fever is mentioned neither in the Index-Catalogue of the Surgeon General's Office nor in Carter's work; up to this date we know of the existence of only two copies, one at Havana, in the private library of Dr. Beato Nuñez, and the other in the Library Company of Philadelphia, Ridgway Branch.

[7] Villalba. *Epidemiologia Española,* Madrid, 1802, vol. 2, pp. 203–207.

[8] Garcia del Real, E. *Breve resumen de la historia de la medicina Española.* In: *Introducción a la historia de la medicina,* by F. H. Garrison. Madrid, 1921, *2,* 457 *et seq.*

[9] Lopez Sánchez. Tomas Romay en la Sociedad Económica. *Cuaderno de Cultura del Ministerio de Educación.* La Habana, 1950, Octava Serie 6, pp. 41–43.

duction and a few pages of the same had been read, it was agreed to turn it over for examination to one of the faculty members who was to give his opinion about the possible merits or useful findings. Dr. Tomás Romay was selected for the said charge.

At the meeting held the 14th of April, Romay apologized for being unable to give any opinion as to the qualification of this work as he was himself writing a study on the very same subject and therefore wanted to avoid any possible prejudice. The meeting accepted his apology, considering it justified and agreed to keep the said memorandum in the archives until Romay presented his own and they could be compared and a decision taken as to which of the two should be published. For the time being, Holliday was to be informed that the Society greatly appreciated his desire and goodwill to help humanity.

No reference was made to Holliday's memorandum at any further meeting of the Society, so that even though it had been written before Romay's, it did not become known to the public. Villalba, in his *Epidemiologia Española,* refers to it under the title "Tratado medico sobre la fiebre amarilla que se llama Vómito Negro, en las provincias españolas de la America Septentrional; distribuido en varias observaciones con un nuevo método para la curacion de la peste que se experimentó el año de 94" and it is maintained that "since it was not printed it is somewhat tedious to analyze." This manuscript is dedicated to D. Manuel Bañuelos, intendant of the Army and Minister of the Royal Order of Queen Maria Luisa de Bourbon.[10]

Having looked it over thoroughly, we can state that it is identical with the one published in English in 1796, the faculty of London having authorized its publication, as can be found in an article of the *Gazeta* of October 27, 1795. It appears to have been published in Boston (printed by Manning & Loring, for S. Hall, No. 53, and C. Bingham, No. 44, Cornhill, 1796), and is entitled *A Short Account of the Origin, Symptoms, and most approved Method of Treating the PUTRID BILLIOUS YELLOW FEVER, vulgarly called THE BLACK VOMIT, which appeared in the City of Havana, with the utmost violence, in the months of June, July and Part of August, 1794. As practiced by Mr. JOHN HOLLIDAY, an English Surgeon, resident in that City.*[11]

The very day that Romay read his dissertation another one, also dealing with the black vomit, was submitted to the "Sociedad Económica." The author was Dr. Juan Francisco Pachon. It was decided to leave it for a future meeting, which took place May 4th, and at that time it was "agreed that the Society express its gratitude to him, informing him, however, that it had decided to publish Romay's work."

Romay's dissertation produced unusual enthusiasm among the physi-

[10] Villalba, *loc. cit.*, vol. 2, pp. 296–300.

[11] Holliday, *loc. cit.* One copy of this book exists in the Library of the New York Academy of Medicine.

Posthumous portrait of Tomás Romay from a mask
made by Dr. Nicolas J. Gutierrez

DISERTACION

SOBRE LA FIEBRE MALIGNA LLAMADA VULGARMENTE

VÓMITO NEGRO,

ENFERMEDAD EPIDEMICA

EN LAS INDIAS OCCIDENTALES,

LEIDA EN JUNTA DE SOCIEDAD PATRIOTICA

DE LA HAVANA,

EL DIA 5 DE ABRIL DE 1797.

Por el Sócio D. Tomás Romay, Doctor en Medicina, Maestro en Filosofia, Catedrático que fué del Texto de Aristóteles, y es actualmente de Vísperas de Medicina en esta Real y [illegible] Universidad.

CON SUPERIOR PERMISO.

Havana: En la Imprenta de la Capitanìa General.
MDCCXCVII.

Title-page of Romay's dissertation on yellow fever, published in 1797

cians who heard its presentation. Full of scientific zeal they felt "this to be the first Spanish account which dealt in an outstanding and accurate manner with a disease which has been studied and discussed so much by foreigners, and recommended that it be printed as soon as possible; furthermore, that a certain number of copies be sent to the Real Tribunal del Protomedicato [Royal Court of Physicians]." The following physicians were present at this meeting: Drs. Mariano Espinosa, Roque Oyarvide, Nicolas del Valle, Matias Canto, Lorenzo Hernández, Gregorio del Rey, Francisco Xavier de Córdova, Juan Dominguez (John Holliday), José Bohorquez, Diego Silveira, José de Jesús Mendez, Pedro Bazat. It was the first scientific session held by Cuban physicians.[12]

At the following meeting, the comments of a few local physicians on the dissertation written by Romay were read, and it was agreed that these be printed. Unfortunately, however, this was not done, preventing us from learning about the critical opinions expressed by Romay's colleagues. On November 2, 1797, Romay's dissertation was finally printed.

This monograph was admirably prepared. Its ideas concerning yellow fever correspond fully with those of the period, although it should be pointed out that they also represent a great step forward. Romay gives us his considered judgment on the disease's development based on his observations and studies of patients. It is evident that his was a Hippocratic orientation.

In Chapter I, dealing with the history of the black vomit, Romay says: "I believe it did not exist in Havana before 1762; I ignore it. At that time it attacked violently the members of the British Army and Navy, and later on showed up again in 1780 and 1794."[13] Romay was mistaken. According to evidence presented by Finlay before the Royal Academy of Medical Science during the session of November 23, 1884, in a study entitled "Memorandum on the early history of the yellow fever,"[14] this disease had been endemic in North America before 1492. As a peculiar exception, the island of Cuba had been left untouched for 138 years after the discovery, which means until 1649, when the first great epidemic of yellow fever was recorded as having been imported from a neighboring continent. This was the opinion of Finlay and was also definitely confirmed by the statistical data of the Cuban epidemiologist, Dr. Jorge Le Roy Cassá.[15]

It is also confirmed by Dr. Saturnino Picaza, who maintains that from

[12] Lopez Sánchez, *loc. cit.*, p. 48. [13] Romay, *loc. cit.*, p. 3.
[14] Finlay, C. J. *An. Acad. Cien. med., Habana*, 1884, *21*, 265, 317.
[15] Le Roy. *La primera epidemia de fibre amarilla en la Habana*, 1930.

1732 on, mention of the black vomit appears in the Acts of the Municipal Council, where the Constable Calvo de la Puerta stated that those epidemics had their origin in the luggage of the King's ships; he also criticized the impurity of the water, because of the refuse of the tobacco mills, believing this to be the cause of the plague.[16]

On the other hand, Romay speaks wisely, in the same chapter, of the most dangerous periods when the disease develops, saying: "This summer, that season of the year when the sun's rays hit us almost perpendicularly and when the atmosphere is mostly charged with humid vapor, was the external cause that produced this sickness." And he later adds: "The terrible hurricane in August 1794 [during the night of the 27th, observes Holliday] that purified the atmosphere and produced a new temperature, dissipated the epidemic and relieved the sick much more than all medical help."[17] In this connection he proves his clear-sighted way of reasoning. While stating observed facts, he makes them into a theory only after experience confirms them, in this case the experience of foreign authors. Let us follow his presentation.

> Not having been able to visit that day the sick under my charge, and the bad weather having impeded the supply of adequate food, I thought I would find them in a most deplorable state on the 29th. Yet, to my greatest surprise and delight, I found some fully and others nearly cured. The same happened to Moultrie, in 1745, in North Carolina. Said province, having been attacked by this plague in June, was suddenly relieved in September, when an intense cold broke in, coming down to 58 degrees F., after which date in all the province no more than 2 or 3 cases of yellow fever were registered.[18]

This observation is sagacious, although of course he could not guess how much truth lay in it. We can explain it today, basing our knowledge on the discovery of Finlay. Knowing that the disease is transmitted by mosquitoes, we interpret that what caused the relief was the transitory disappearance of those mosquitoes.

Romay considered the exterior causes to be climate, excessive heat, humidity, and vapor of stagnant water, and the predispositions to be temper or constitution and diet. Once all these factors acted upon the organism, they caused a thickening of the humors, which led to obstruction; and from the acrimony of the humors came inflammation, spasm, pain, suppuration, and gangrene. Following the spirit of the period he rectified Sauvage and Cullen, and classified the sickness as synochus, considering that an inflammatory state was first produced, the synochus, and later on

[16] Picaza, *loc. cit.*
[17] Romay, *loc. cit.*, pp. 4–5.
[18] *Ibid.*, p. 6.

a putrid one, the typhus. This fact reveals some degree of scientific independence. It also confirms what we believe concerning his medical doctrine, that it was intended to form an eclectic bridge between the principles of the iatro-chemical school and Cullen's solidism.

The symptomatic description of the fever is brilliant. It reveals a sound observer, especially considering its form of presentation, which is reminiscent of the elegant and poetical narrative prose of French authors. And, as Montoro affirms, it may be read with interest even now.

In his differential diagnosis between yellow fever and malaria (remittent or intermittent), Romay indicated correctly that the latter attacks foreigners as well as natives of any age, sex, or condition, while the black vomit could be said to attack the newly-arrived, rarely the natives, very seldom women, and never Negroes. Tertian fevers appeared every year, especially in summer and autumn; the black vomit, except for a few rare cases, was to be found in summer only, upon arrival of some squadron or army in that port.[19]

Its fundamental method of control was cleanliness, and to prove it, he narrated the experiences of the English Captain Cook who, in spite of having to cross the most infected seas and ports of America, kept his ship free of any epidemic of the black vomit, thanks to his efficient hygienic efforts, keeping clean his crew and the ship's hold, using fire to clean the most distant and hidden corners of his ship.[20]

His observations agree fully with those described by Benjamin Rush in his famous study, *An account of the bilious remitting yellow fever as it appeared in the city of Philadelphia in the year of 1793*.[21] Both authors share the antiphlogistic system: laxatives, enemas, and bloodletting as a curative method for the black vomit.

Romay's work is fundamentally surprising in its similarity to the book written by Rush, which was unknown to him. This proves, of course, that their opinions derived from the common background of the period. The only difference is in the extensiveness of their presentations, as Rush wrote a book, enabling him to amplify his account of causes, symptoms, and treatment of the disease, while Romay's account was rather limited, having been submitted as an oral dissertation.

The short monograph of our Cuban countryman, however, can stand every comparison with foreign authors, especially Spanish and American, and in many cases it even surpasses them. With an extraordinary capacity

[19] *Ibid.*, p. 28.
[20] *Ibid.*, p. 29.
[21] Rush, B. *An account of the bilious remitting yellow fever*, Philadelphia, 1794.

for synthesis, Romay offers a concise work elaborated on a magnificent plan. At that time it was the best written in Spanish, according to a communication he received from the Royal Medical Academy of Madrid which named him a corresponding member. This institution characterized him as superior to Gastelbondo whose work was considered the best of all.

No comparison can be established with works written by Pachon and Holliday and submitted to the "Sociedad Patriótica," since we were unable to find these manuscripts, although that of the latter seems plainly to be a Spanish version of the one published in English. It appears to be rather inferior to Romay's, limited merely to a summary of the symptomatic course of the disease. In agreement with Romay's description as well as with his discussion of methods of treatment, Holliday considers himself to have been successful with three kinds of prescriptions: (1) Glauber's salt, manna and decoction of tamarinds; (2) a decoction with quina and tamarind, niter salt (saltpeter) powdered, crab's eyes, and syrup of violets (a modified emulsion of van Swieten's which Romay considered to be effective not because it contained crab's eyes, but opium; and (3) Peruvian bark, snake-root, and rhubarb tincture. All of these were mainly evacuants to be applied, according to Romay, any time the organism supported them, to fight caccochylia (bad humors). We can see that they differ only as to bleeding, which Holliday rejected definitely, especially at the beginning of the disease, a period when Romay recommended it.

In this dissertation on yellow fever Romay based his opinions on those of French authors who undoubtedly gave us the best studies of this disease before Finlay, although he takes an eclectic position, favoring opinions that seem to have more logic, and opposing or rectifying others which seemed to him less adaptable or suitable on the basis of his experience. Thus, for instance, in order to explain the yellow color of the sick, he denied Makittrick's affirmation that the yellow color is produced by the lymph instead of the bile and joins Moultrie in saying "that the icteric color of this disease is caused principally by the refluence of the bile when finding the secretory channels blocked by their own thickness or tightened by some spasm," which is far more correct.[22]

In Romay's treatise attention is paid to the care to be taken with the ships—vessels of the yellow death—as the epidemic-producing germs were hidden in their holds in the form of emanations and miasmata. Later he abjured this stand and denied the contagiousness of the disease, affirming "that the observations made over a period of five years as well as those

[22] Romay, *loc. cit.*, p. 19.

made by M. Devèze and Drs. Moseley, Titler, Smith and other well-known physicians prompted me to change my opinion."[23]

The idea of the contagiousness of yellow fever was a scientifically unsolved problem up to the moment when Finlay's conception indicated metaxenic transmission. The opponents of the theory of contagiousness offered what seemed to them conclusive proof of their affirmation, namely, the fact that by maintaining personal contact with a yellow fever patient, no matter how close this contact was, the other party was not infected, whereas on the other hand, others who avoided any contact with extreme caution were attacked by the yellow fever. Romay informs us of these facts in an article written in 1800, basing his opinion on the belief of Jean Devèze. In it he tried to refute the opinion of a certain C (pseudonym for Dr. Holliday?) who, according to Dr. Hookham, claimed the yellow fever to be pestilential and contagious and different from the Black Vomit and the Maladie de Siam.[24] Romay says:

> I could observe the same thing in our hospitals. In all of them except in San Ambrosio, the sick attacked by Black Vomit were all mixed together with other patients, with no separation of garments or other belongings. Those vomiting atrabilis drank from the same glasses as those suffering from tertian fever, and many times I saw the floor in some ward of San Ambrosio, where more than a hundred patients of all ages and tempers were lodged, many of them not yet acclimatized, covered almost entirely with black blood that had been vomited. And yet, there could be found no case, not a single one, of contamination, neither among the patients nor among assistants or surgeons who had performed autopsies. And could there have been more powerful circumstances to cause contamination?[25]

Considering that these three designations correspond to three different diseases, he continued: "What others say is not sufficient: what is to be proved is the different nosological character of each of them" which he "still considers as the same sickness."

Romay was completely right, because those synonyms were derived from the predominant symptoms of the diseases. The name Maladie de Siam originated from the fact that the ship "Oriflamme," coming from Siam with scales to Brazil in 1690, imported one of the most death-dealing epidemics into Martinique. He then affirmed: "If the authors you mention do not speak about the Black Vomit, it is because they saw no account given by the Spanish authors who imposed this name for said disease."[26]

In the same article, on the other hand, he gave proof of a surprising erudition, remarking that the latest works written by foreign authors re-

[23] Romay, T. *Disertación sobre la fiebre maligna.* See *Obras escogidas,* vol. 2, p. 86.
[24] Romay, T. Polemica con el Dr. C. *Papel periodico de la Havana,* 1800, nos. 72–73.
[25] Romay, *ibid.* [26] Romay, *ibid.*

garding this matter are not unknown to him. He mentioned, among others, Rush, Carey, and Deveze, and he objected to the opinion that foreign experts have more knowledge about yellow fever and were better able to cure it than Cuban doctors, exclaiming: "This is a completely injurious and unfounded libel. Their own studies prove that they surpass our theories in no way, that they apply no remedy unknown to us and are not more successful in their cures than we are."[27]

Roque Oyarvide in his extensive study on this subject supported Romay's point of view in this respect. He praised Romay's knowledge of yellow fever but disagreed with him at the end, saying that he could not accept the view that yellow fever is a non-contagious disease.[28]

Most physicians, however, considered the disease non-contagious, the best proof being that in 1827, when D. Antonio Duarte Zenea submitted to the "Sociedad Patriótica" a project to found a lazaret to isolate all yellow fever patients, this organization consulted with the Real Tribunal del Protomedicato as well as with Dr. Romay, and they all agreed that a lazaret was not necessary "since experience and reason has shown us most categorically that in our country this disease is not contagious and that it only attacks individuals coming from cold climates, who are not yet used to the permanent heat."[29]

This idea was derived also from the conclusion reached by the Medical Academy of Paris, after examining and passing judgment on the documents gathered and presented for its consideration by Nicolas Chervin at the meeting of May 15, 1827. Among these documents there can also be found one which Dr. Romay had given him during his visit to Havana in 1819. Chervin had been travelling for eight years studying yellow fever.

In the last article, "Observations about the Yellow Fever," which Romay published July 20, 1830 in the *Diario de la Habana,* he maintained his opinion of non-contamination.[30] He adhered to the doctrine of Broussais, finding in its description of gastritis nearly all the symptoms and phenomena he had observed in the black vomit with greater intensity. He said: "I did not doubt it belonged to this specimen, constituting a variety greatly different from others and which should be called gastro-hepatitis."

Relying on the interpretation this doctrine gives to all the symptoms of the disease, as originated by an irritation of the mucosa, Romay returned

[27] Romay, *ibid.*

[28] Oyarvide. Quad comuniter dicitur loquendum est cum pluribus, et sentiedum est cum paucis. *Papel periodico de la Havana,* 1800, nos. 87–88.

[29] Instalacion de un lazareto para aislar a enfermos de fiebre amarilla. (Inédito) Archivos de la Sociedad Económica, Leg. No. 14.

[30] Romay, J. Observaciones sobre la fiebre amarilla. Diario de la Habana, 20 July 1830.

to the therapeutic method known as antiphlogistic, from which he had earlier withdrawn. The majority of our physicians were influenced by this policy, the main characteristics of which consisted in depriving the patient of his nourishment and applying leeches to the epigastrium or to the jugulars, bleeding repeatedly. Romay claims to have been so successful with this treatment that anyone differing from this system and prescribing tonics and stimulants had to rectify his judgment and adhere to the antiphlogistic method. He referred to this fact as follows:

> One of my colleagues who was rather an ontologist than a clinician abused the license conceded by Horace to impose new names upon new things, taking them, if necessary, from the Greek language. The yellow fever was not an unknown disease; it had made itself too strongly known in the harbors of the American continent and islands, especially in Martinique and Barbados where Makittrick observed it in 1718. It is true that the names it has been given up to the present are not adequate, they refer only to one circumstance, to one or another symptom which can neither be found in all patients of this disease and not necessarily characteristic of it. Yet this specialist did not proceed more exactly with his etymology or nosology, naming it simply 'thermo-adinamic or thermo-ataxic fever,' prescribing, logically, a tonifying and stimulating régime to be followed from the onset. The resulting effects bore out my opinion, and the other professor, Dr. José Pérez Bohorquez, after having observed both wards and compared the results of the different curative methods applied, agreed with me. Up to this day he still follows my method in private cases as well as in the San Juan de Dios Hospital of which he is in charge.
>
> Another colleague, well acquainted with the theory of the art of curing, who had observed the patients most carefully and thoroughly, continued his investigations in later cases. He published some of them in 1824 in a memorial which was rewarded by the 'Sociedad Economica' of this city. That proved to me once more that my conviction was the right one and gave me also more confidence in the system I had always preferred.

The physician he refers to is Dr. José Fernández Madrid, an outstanding poet and a man of most liberal views who had arrived in Havana from Bogotá as a refugee, having been deported for his part in the fight for the independence of his country. In 1821 he published his work about the yellow fever which is mentioned when Romay criticizes the aim of giving the disease a new name. It also was translated into French and published in Paris the following year. It is, by the way, the only Cuban book mentioned in the posthumous work of D. Antonio Hernández Morejón: *Bibliographical History of Spanish Medicine.*

As Romay says, Fernández Madrid in his *Memoria sobre el influjo de los climas cálidas y sobre todo el de la Habana, en la estación del calor* rejects Brunonianism and adheres publicly to the doctrine of Broussais and consequently to the antiphlogistic therapeutic system derived from it. Dr. Francisco Alonso Fernández, as well as Juan A. Pérez Carrillo, who

were selected to judge this essay and its merits, considered that "after having studied and discussed this doctrine, it was easily understandable that its propositions emanated from the irrefutable author of physiological medicine [Broussais] and may definitely be accepted as favorable and useful to humanity as well as convenient for the instruction, progress and talent of many professors confused by Brunonianism."[31]

This attitude indorsed once more the indisputable authority of Romay regarding yellow fever. As we have already repeatedly pointed out, his ideas dominated the pathogenic and therapeutic conceptions our Cuban doctors had of the yellow fever. Change of opinions, acceptance of new or different judgments depended all the time upon Romay's verdict; if he did not back or favor it, those who had followed it formerly desisted from it. However, there was no blind or unjustified imposition of the *"Magister dixit."* Romay said: "The man who thinks will not be convinced by authorities but by facts and reasons," and all his life long he acted that way with loyalty and intelligence. He never feared to admit his errors, and whenever he backed a new theory he did so after having observed and experimented until convinced of the advantages or logic of the new doctrine. He was active all his life and studied and learned at the side of the sick. He was thoroughly acquainted with yellow fever, having devoted thirty years of his life to studying the works of the best known French, English, Spanish, and American authors. Among those he mentions are Pouppe-Desportes, Chevalier, Moultrie, Huck, Pringle, Desperriers, Adair, Lining, Vandermonde, Devèze, Rush, Carey, Tomacini, Broussais, and Aréjula. Romay was interested in confirming their ideas or in reconciling them with his own experience acquired in military hospitals where he was chief physician and which were most appropriate places for studying the black vomit, since in them were hospitalized most of the troops sent from Spain to this island—strong, young men who were promptly transformed into an easy prey of yellow fever.

With Romay a period starts which immortalizes Cuban medicine. Whoever reviews carefully our bibliography of yellow fever and compares it with that of any other country of the world will not be amazed that Carlos J. Finlay announced to the world the discovery of the transmitting agent of this disease. It will be clear to him that Finlay represented the culmination of a hundred years of indefatigable work and valuable contributions. One must also recognize that the modest scientist named Tomás Romay, who by subsequent generations has been regarded only as the person who introduced vaccination to Cuba, dominated for half a century

[31] Actas de la Sociedad Económica (manuscriptas). Libro de Acuerdos, 1824, vol. 7, fol. 3–4.

the history of yellow fever on the island with his opinions based on a broad erudition and a long experience in medical practice. Although the injustice of oblivion has kept him from the pages of the universal medical literature, he will forever remain the builder of the mountain Finlay ascended to reach glory and to give to the universe the light and strength that enabled men to defeat yellow fever by destroying the vehicle of its propagation.

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An American Doctor in Paris in 1828

Selections from the Diary of Peter Solomon Townsend, M.D.

Chosen and Introduced
by
GEORGE ROSEN

(Second and Final Installment)

(*Monday, March 10*)

At 5 p.m. went by invitation to dine with M. Pariset at his private apartments (3rd story) Rue Poitiers No. 8 in the house where the Academy of Medicine of which he is perpetual secretary hold their sessions. Madame Pariset an intimate friend of the late Berthollet and other scavants whose spirit and emotion she seems to have imbibed, is a lady of about 45, of most amiable manners and interesting conversation. She received me with great courtesy inquiring who I was, though her husband had not yet come in and tho' I had not had the pleasure of seeing her before.

I had the pleasure of meeting there the celebrated Mr. *Champollion*[95] the younger who has immortalized himself by the discovery of the grammar or key to Egyptian hieroglyphics and the pleasure of meeting whom was one of the most agreeable anticipations I had cherished in a visit to Paris. Imagine then how delighted I was to have an opportunity of becoming so particularly acquainted with him thro' his intimate friend Mr. Pariset and who made our meeting still more precious to me by the very flattering manner in which he introduced me. Here I must digress to tell you more in detail of that extraordinary scavant to the exclusion for a few moments of other particulars which but for the transit of a comet of such brilliance over the disc of our circle would have been sufficiently interesting to have occupied a much more conspicuous and circumstantial notice than I shall now have time to give.

M. Champollion Jeune, or the *Egyptian Champollion* as he is designated in contradistinction to his older brother who also was of the party, is one of those few scholars whose close application to study has not left any visible impressions upon the fine traits of physiognomy and person with which nature has endowed him. His manner and smile and the form

[95] See above, page 101.

of his features and shape of his face, but for his full black eye and dark hair and bushy eyebrows are the very image of Col. Homer Maxwell of our city and still more of . . . [breaks off].

His modesty is not less remarkable than the very polite and communicable disposition which he evinced to answer all the innumerable interrogatories which everybody from time to time put to him in the course of the evening relating to the matter in which he has acquired such great and deserved celebrity. M. Pariset had already told him of my wish and readiness to accompany them into Egypt on the great expedition which they have it in contemplation to make there, Mr. P. to investigate the causes of pest and Mr. C. to examine the antiquities of that country. He almost immediately referred to the projected expedition to Egypt and hoped that the present prospect of war in the East would not end in anything so serious as to become an obstacle to the fulfilment of his wishes. Mr. Champollion, on my allusion to Walsh's review of him, remarked that he was "surprised the author of the critique should have found reason to censure him for dedicating his work to the *Duke de Blacas,* for says he in America probably you are under the apprehension that the nobleman is like most others of our *grand seigneurs* not much addicted to literary or scientific pursuits and especially but little acquainted with the difficult subject which has occupied my studies. It is true he makes no pretensions to these talents [?] but it must be recollected that it is to his taste in those studies, his friendly patronage of me and particularly to his influence with the government, whatever may have been the motives from which these proceeded, which have enabled me to prosecute my research in the manner I have. It was for this I felt grateful to him—and had good reason to express my acknowledgments for services rendered by him to me of such essential importance."

Mr. Champollion in speaking of the religion of the Egyptians and of the space it occupied in all their hieroglyphic writings upon the coffins and mummies and monuments said very truly in reply to a remark I made that it constituted the sum and substance of the history, that it was the *cement which united together all the different parts of the social system.* He admitted that there were many curious analogies in the symbols of their worship and in those of the Christians who succeeded them—that the discoveries of the progress they had made in all of the different arts of which the world had not suspected they possessed the least knowledge, was calculated to humble our pride as much as it was to elevate the rank which that nation would hereafter hold in history.

Monday, March 10th[96] (continued)

Among others present were Mr. Constancio formerly charge des affaires in the United States during the time of the French Republic [and] the celebrated chemist Mr. *Chevreul* a member of the Institute whose history, in a conversation I had with him, interested me and which I will another time relate to you more fully. This unassuming and meritorious gentleman is one of the numerous instances of those whose inoffensive manners and meritorious researches in science could not disarm the malignant despotism of the tyrant, Villele[97]—having been *destitué* or deprived, to speak more intelligibly, of the Professorship, he held at the Gobelins, of Chemistry as applied to the art of dying [*sic*].

There was also present Mr. *Des Portes,*[98] a descendant of one of the oldest and most esteemed writers on yellow fever *Poussé Des Portes.* We had a long and detailed conversation on the subject of the contagious nature of that disease of which Mr. D. is anxious to obtain further information before he can give his unqualified assent to it—begged me to put together or procure as speedily as possible all the proofs that could be obtained in favor of that side of the question to which I perceived he seemed inclined to learn. He asked me to describe its pathognomonic symptoms &c—of its specific nature he has no doubts.

After a long tete a tete with M. Pariset & writing out plans to defeat the schemes of those who are endeavouring to do away with the quarantine system in France as respects yellow fever he left us for the Salpêtrière. I must not forget to mention another of the party at dinner Madam ———, step daughter of M. Pariset who spoke some English with me as well as Mr. Constancio who was educated in England and speaks the language perfectly.

Our dinner consisted of an excellent course of dishes, commencing with soup a la vermicelle, & concluding with roast venison, a pasty composed of sweet bread, trouffles & mushrooms (very fine), fowl with olives, custards, confectionery, excellent Bordeaux wine, liqueurs (among them anisette of Bordeaux) &c &c—coffee from Mocha &c.

Sat down at 6 p.m. and left at 10 p.m.—highly delighted with my visit.

[96] Series 2, Vol. 10, 1828.

[97] De Villèle was an ultra-royalist and reactionary minister under Louis XVIII and Charles X.

[98] Probably Henri-Eugène Desportes. Born in 1782, received his medical degree in 1808 at Paris. Became a member of the Academy of Medicine.

Tuesday, March 11th

Remained at home all day preparing my critique of Chervins Documents.

Wednesday, March 12th

Nearly finished and copied the same amounting to about 50 pages.

Thursday, March 13th

As ¼ before 6 p.m. went by written invitation . . . to dine with our American Ambassador Mr. Brown. [Conversation at the Ambassador's dinner dealt with French politics, the Royal family, gossip, American politics.] Gen. Barnett in allusion to *Pariset* of whom I was speaking said he was in the minority here on the matter of contagion and moreover that he was not held in much repute as a practical physician but was more known as a writer.

Saturday, March 15

[Visit to Palais de Justice & Garden of Plants where he saw Broussais passing.] On our return from this spot of enchantment took a hack near the Garden soon after which passed the distinguished *Broussais* in a cabriolet & received from him a very polite bow. He wears spectacles, has a beautiful set of teeth & fine oval handsome face. . . .

Monday, March 17th

Went in the morning early to the *Hopital de la Charité* & presented to Mr. Roux according to promise my operation on *Russel's nose* at Nassau & left also one of my memoirs on the Bahamas for *M. Boyer* his father in law & colleague.

After breakfast went to the Salpêtrière & had an interview and conversation with my friend Pariset. From thence called with the critique I had prepared (in answer to the Report of the Academy of Medicine on Chervin's documents) on Mr. Chevreul at the Gobelins at Mr. Pariset's request. Mr. Chevreul whom I had met and talked with at Pariset's house received me with great kindness. I found him experimenting in his laboratory which is a part of the establishment of the Gobelins and where he also lives and to which institution he is attached as chymist.

After talking over the matter of yellow fever for a short time, we walked together as far as the *Mint* where he had an appointment & where I parted with him.

At 5 p.m. I went again by invitation to dine with my friend Mr. Pariset Rue Poitiers No. 8. en famille—the only other guest being M. *Girardin*[99]

[99] Townsend's spelling of proper names is not his strong point. Here he probably refers to N.V.A. Gèrardin (1790–1868) who wrote many clinical and epidemiological works on cholera, yellow fever, and other communicable diseases.

whose writings on yellow fever (having been a practitioner at New Orleans) I was already acquainted with. I was particularly pleased with M. G. & with his clear and correct views on the subject of contagion. I found him quite au fait on all the different points of the controversy and very complimentary in his remarks towards myself which were so much the more gratifying as coming from a gentleman of such sound sense & eloquent powers of expression. We remained until near 10 when Mr. Pariset accompanied us as far as the Pont Royal whence I proceeded home.

Tuesday, March 18th

Called at 11 a.m. with a note of introduction from M. Pariset which he gave me the other day on Monsieur le Baron *Hely D'Oysel* one of the King's council, member of the Chamber of Deputies &c &c. M. le Baron received me very graciously. I found him in his private cabinet after passing through a suite of pleasant rooms in the second story of the House No. 29 of the Rue Fossé, St. Germain Auxerrois, near the E^{n}. end of the Louvre. We had a great deal of interesting conversation on the subject of the health laws of the United States—yellow fever—contagion &c. The Baron is about 50, a man of large frame and stature & exceedingly agreeable & sensible. He had studied medicine as an amateur and was quite conversant with all that appertained to the different quarantine codes of England, France and the United States & said that it was probable the matter would be brought before the Chamber before their adjournment.

Spoke also of General Jackson &c. Invited me to come & see him & also took my address—to call on me. At 7 p.m. Mr. Pariset & Mr. *Desportes* came to see me and some time after Mr. *Girardin* according to previous arrangement. Had a long talk on the plan which ought to be adopted in bringing forward a counter report from me before the Academy of Medicine.

Compared own ideas—looked into the affair of the yellow fever at *Middletown* which all thought amounted to absolute demonstration of contagion and importation. I told them Beck[100] since his apostasy never touched on the damning evidence he had there given against the doctrine he now espouses &c—&c—the affidavits of Baiseley[101] & Dr. Bayley's[102] letter (in the text) of my work on the yellow fever of New York 1822 were also read—&c.

[100] Townsend may be referring to the Beck who wrote in the *American Medical Recorder*, 1821, *4*, 284.

[101] Not identified.

[102] Richard Bayley (1745–1801), health officer of the port of New York. In 1788 he was chosen Professor of Anatomy in the medical school of Columbia College. Later he became professor of surgery. Bayley was involved in the Doctors Riot.

Among the other things M. Pariset told me he had ten times more business than he could attend to—1800 persons at the Salpêtrière (the folies, epileptiques & idiotes) under his charge, the Secretaryship of the Academy of Medicine which was alone sufficient to absorb all his time, his duties as member of the *Conseil de Santé* of the Kingdom &c &c.

Wednesday, March 19th

Went at 7 a.m. to the *Val de Grace;* Mr. Broussais had just finished his visit thro' the wards & entered the lecture room. Before he began observing that he recognized me through his blue spectacles I bowed to him & handed him a copy of my memoir on the Bahamas. Without taking off his bonnet or his hospital apron which (contrary to the custom of all other French surgeons I have seen) was of a dark instead of a white color—different as he is from them in his bold & ingenious theories in pathology he began to go over the cases he had visited according as they were numbered in the Hospital Register in his hands. After which clinical observations he took a folio sheet of paper doubled from his pocket which contained the heads of a lecture which proved one of a highly interesting nature as usual from the eloquent & gifted professor. The subject was apoplexy in continuation of the Phlegmasiae. The description of the symptoms, course of treatment &c intermingled & interspersed with extemporaneous remarks of the most pungent, spiritual & sarcastic nature chiefly levelled against the charlatanerie & pretensions of his contemporaries. He denounced the nux vomica in cases of paralysis as a poison & abhorred also the too common practice of *mineralizing the stomach* as he termed it whereby its tone was irremediably destroyed. Spoke of the cerebral irritations simulating or approaching in character to apoplexy which might arise from complications of gastric & visceral derangement—of the necessity before prognosis or treatment of studying well the history of the organs, grouping them &c—not acting ex parte & blindly after a certain routine without guide or principle. He said it was necessary to "detruire *les vaches* en medecine"—i.e. pretenders. Said Chaussière, tho' he had an apoplectic stroke, was the first medical head in Paris. He said the partial paralyses, contortions &c of the mouth, hands, eye, tongue, &c were apoplexies in miniature resulting from pressure or irritation, that cases of apoplexy might be produced by ulceration & suppuration in the brain as well as by pressure or rupture of the blood vessels. Among the means of depletion—general bleeding, leeches &c. (He omitted to recommend what I think one of the most efficacious & speedy remedies—opening the temporal arteries PST.).

Deprecated Emetics which it was the practice to give in apoplexy after the patient had been bled and revived.*

Baron Larrey

Between 3 & 4 called by appointment upon the Baron Larrey as he had politely fixed this hour for me to call on any day I had leisure to get his memoir on yellow fever. The Baron lives in a very plain retired way on the 2nd story of No. 3 Cul de sac de Conti adjoining the Mint. In the courtyard the servant was putting the horse in a plain yellow gig (a cabriolet as they are called in Paris) which doubtless to this celebrated surgeon, who in the time of Napoleon by whom he was much cherished and when he was at the head of the Army Surgical staff, sported in all likelihood his coach & livery. Still however he is every where revered & respected even by the Bourbons by whom he is yet permitted to hold the rank of Surgeon in chief of the Royal Guard & of the fine military Hospital of *Gros Caillou* appropriated to the use of that corps.

The Baron was at breakfast in his library but insisted on my entering with all that frankness and simplicity of manner for which he is so remarkable.

On his little eating table was a joint of cold veal & a plate of radishes without wine or other dish to add to this simple repast. The lateness of the hour of his breakfast was owing to his numerous avocations having prevented his return home earlier. Seeing him thus situated I soon made my congé & left him as soon as he handed me the pamphlet which brought me to see him & which he accompanied with several others, inviting me as I took my leave to come to visit his hospital whenever I had leisure & in return to the remark I made that I was happy in having had this opportunity of paying my respects to him, said it would give him great pleasure to be useful to me during my residence at Paris.

Among numerous other pictures and engravings in his room I observed one of General Lasalle & another of ——— both full length & without names underneath.

The baron is thickset & of short person with a large dark eye & expression & full face. His hair is still black, flows down long over his neck in the style which prevailed during the consulship. He is the only person Profess. D told me who during the time of Napoleon wore a cocked hat cut after the exact pattern of the Emperors.

*I was again struck with the beauty of the architecture, the fine dome of the church and the spacious and comfortable accommodations of this noble establishment of which M. Broussais is the illustrious chief.

He carries the red ribbon in his button hole & notwithstanding his former intimacy with Napoleon is I believe in favor at court. A person indeed of his quiet amiable temper & unblemished character is calculated to enjoy the good will of all parties.

In a visit I made to Jacquemont on Monday talking of *Vauquelin*[108] & *Chevreul* he said they were both of the first order of chemists & had distinguished themselves by their discoveries but that with all their native genius & the best materials in the world to work with they were both unfortunate in the art of communicating or transmitting their ideas to others —their writings being exceedingly labored & ennuyant. *Chevreul* had distinguished himself on the subject of *animal fat.* Vauquelin tho' at least 60, works 12 or 16 hours out of the 24, as much Jacquemont says & as zealously as when he began his career.

Thursday, March 20th

Before 8 a.m. walked to the *Hospital Grand Caillou* (which literally translated is *Big Flint*) to accompany Baron Larrey. About 50 persons as before, among them a number of foreigners followed the distinguished surgeon in his visit through the different rooms. The Baron is better known to foreigners than most of the eminent surgeons of Paris, probably from his having distinguished himself so much in other countries during the campaigns of Napoleon & by his writings & the high rank he held as Surgeon in chief of the Army. There seems indeed to exist towards this gentleman not that feeling of reverence which is paid to age for his dark locks, soft black eye, fair healthy complexion (the result probably of a temperate life & the characteristic serenity of his disposition) do not yet manifest (tho' he is at least 55) any indications of constitution worn out as one would suppose it to be by long military service. But a respect of a more elevated & marked character on the part of those who follow his visits than, as I have before observed, I have seen in any of the other Hospitals. One striking evidence of this is the good grace (whether compulsory or not I do not know) with which those forward young gentlemen who make up the medical schools of Paris submit to the practice peculiar to this hospital (& which I presume must be a severe punishment to them) of taking their hats & bonnets off while they are in the different wards. It was amusing to see the patients who are all fine looking young men (belonging

[108] Louis-Nicolas Vauquelin (1763–1829). Studied chemistry with Fourcroy whose friend he became. He discovered chromium. Vauquelin was one of the first members of the Institute and taught chemistry at the College de France as well as at the Faculty of Medicine. The numerous contributions of this scientist are contained in the *Recueil de l'Académie des sciences* and in the *Annales de Chimie* (1797–1812).

to the Royal Guard & therefore picked) smoothing up their hair and twirling out their mustachios as the Baron approached them.

There were no cases of any particular interest except perhaps one of a recent fracture of the thigh which afforded the Baron an opportunity of showing the simple & comfortable (as it may be truly called) mode of dressing adopted by him. In discoursing upon this to the class (a more particular account of which may be seen in his article on *Surgery* which he gave me yesterday published in the Encyclopedie Moderne) he took occasion in addressing himself to me to allude to the ingenious practice of extension followed in England and also (I added) in the United States, his objections to which were couched in terms so mild and in a tone so perfectly gentlemanly that they would not have given offence to the warmest partisans of that system. It is unnecessary to repeat that the Baron does not make use of the least extension whatever (for he does not believe it necessary to prevent as is asserted the shortening or retraction of the limb) but leaves the leg cushioned in an easy agreeable posture between bags (accommodated in shape to the thigh) containing oats or hemp seed, & external to that two others longer & flat & then the elastic rolls of straw already mentioned. Descending from the wards after the visits were finished we crossed one or two of the interior courts into the room appropriated to autopsie examinations to examine the body of a *hussard* who two days before had put an end to himself in a state of intoxication by falling on his sword. This was a fine looking young man of about 25 or 28 whose handsome soldier like proportions & manly countenance ornamented with a genteel pair of mustachios seemed to have merited a more honorable death. These however & the gay plumage which he had so lately worn in all the pride of military pomp seemed but a sorry comment on the humiliating uses to which his mortal remains were now to be consigned for the benefit of pathological science.

The point of the sword had passed into the lower part of the abdomen, but on removing the teguments did not appear to have perforated any other of the viscera but the mesentery in two places slipping by the intestines & without cutting the larger vessels or nerves on the spine where its progress was arrested. The quantity of blood however effused from the mesenteric vessels into the cavity of the abdomen was near a quart & the exhaustion it produced was probably the occasion of his death. . . .

Friday, March 21st

At ½ past 6 a.m. went in a fiacre to the *Hopital de la Pitié* situated near the left bank of the Seine adjoining the Garden of Plants & about as

far in that direction from my hotel as Baron Larrey's hospital is in the other. I went particularly to go round with the celebrated Mr. *Lisfranc*[104] whom I found in one of the wards of this extensive charity surrounded at this early hour by about 100 students, the largest class of medical young men I have seen at any of the hospitals of this capital.

M. Lisfranc, the successor to Béclard[105] who died in 1825, is a fine looking & unusually tall man in stature with a prominent aquiline nose, a small penetrating black eye & curvilinear expression of the mouth which with his brusque decisive manner & his walk, voice & attitude reminded me much of Dupuytren whom I thought he had chosen as his model in medical ethics but whom I afterwards learned he is by no means an admirer of. Dupuytren in fact did all he could to prevent Mr. Lisfranc getting the place of *Chirurgien en chef* of this hospital. I found also in making myself known to Mr. Lisfranc as he was on his way across the court to the Amphitheatre (where he operates & lectures after the visit) that he was quite a different person also from Dupuytren in the suavity of his deportment & the frank & pleasant familiarity with which he chatted with those who addressed him.

When we reached the Amphitheatre he very politely placed me in a chair near him & then commenced lecturing debout (i.e. standing) in a very rapid eloquent & animated style on the *Clinique* of that morning visit, interspersing his observations like Broussais with divers sarcastic allusions at the pompous pretensions of some of his contemporaries and antagonists. He spoke of the *paper reputation* of certain persons, their impudent denunciations &c with a keen & bitter irony done in so good natured a way that no one would suspect that he felt toward those whom he castigated in so severe a manner the least acrimony or venom—which in fact I should judge to be the fact.

After the lecture was over the operating table was introduced & a female about 25 placed upon it. The legs being bent back towards the belly by assistants, the *speculum*[106] was introduced into the vagina, a candle placed before it to see that all was right & then a pair of double pronged forceps resembling in size and shape a curling tongs was passed thro' the speculum down to the mouth of the uterus, the neck of which being

[104] Jacques Lisfranc (1790–1847) known for his amputations of the jaw, of the shoulder, and of the foot at the tarsometatarsal joint.

[105] Pierre-Augustin Béclard (1785–1825). Studied first at the Hôtel-Dieu of Angers. He came to Paris in 1808, where he soon carved out a place for himself. Like Bichat, his life was short. Béclard was surgeon-in-chief of the Pitié in 1815, professor of anatomy in 1818 and member of the Academy in 1820. He was an eloquent and learned teacher.

[106] The speculum was used by Récamier since 1801. It was first demonstrated before a large medical group in 1818. Dupuytren, Chaussier, Desormeaux, Husson, Cayol, Fizeaux, and Droguet were present at this demonstration.

grasped & held firm by the prongs was (after the speculum had been removed by the wide slit thro' one side of it) pulled out gradually into the os externe after the manner of pulling a polypus out of the nose. This produced scarcely the least pain. After the first forceps had been replaced by another which was made to grasp the neck in a better manner, this latter being held by the assistant, Mr. Lisfranc took a common curved bistoury & with the utmost facility & precision the whole of the diseased schirrous rim of the os uteri being exposed to view cut off the same about ¾ of an inch from the orifice, without occasioning the slightest pain which seemed very remarkable to all though Mr. L. said he had always observed it to be the fact in the 25 or 26 times he had operated. Scarcely any hemorrhage. The uterus in truth is composed of such spongy vascular matter & so scantily supplied with nerves that this apparent insensibility is no more to be wondered at than that of the liver or lungs. The part taken off was not only schirrous but partially ulcerated.

The dome of the amphitheatre is garnished by a gallery which was as crowded with admiring spectators as the seats on the ground floor.

From the amphitheatre of operations we went a short distance to that of *autopsie examinations* & which is also supplied with benches for the accommodation of pupils. Two bodies were examined, one where the scull [*sic*] on the right side was badly fractured with a handful or more of black clotted coagulum which had extravasated between the cranium and dura mater & indented a cavity into the outer surface of the brain. Mr. L. spoke of this patient having survived the accident for an unusual length of time for one of so serious a nature. The next *autopsy* was an old man in whom there had been *Phlebitis* or inflammation of one of the external veins of the arm from bleeding, producing obliteration of its calibre & transformation of its coats into a white ligamentous flat or tape-like substance closely adhering to the muscular & cellular matter beneath. The liver on being cut open was shockingly diseased notwithstanding its healthy color and appearance externally by large spheriform tubercles or rather circumscribed sacs containing a greenish yellow liquid matter. Butchers say oxen always have their livers ulcerated in this manner during winter but not in summer. In summer the vegetable matter they eat attenuates & evacuates the inspissated bile which has probably produced them. May not therefore this extensive state of disease exist for a long time without endangering the general health? This man had not died of either of the above complaints.

One of the persons in the crowd who was talking most with Mr.

Lisfranc was quite a young man, Mr. Thomson, who told me however that he was 28 years of age, that he was also an American from Baltimore, had been living in Paris ten years & was now practicing here & one of the surgeons of the hospital. He intends to reside here permanently. I perceived quite a strong brogue in his English. His history however is a flattering sample of American enterprize. Got home before 10 by a cabriolet. The rain poured down & ran thro' the gutters of the streets in torrents.

Cleared off after noon & at 2 p.m. Mr. Caines & Moulton having called, Mr. Caines & myself went into the Louvre passed thro' the Picture Rooms & went to the Egyptian Halls. . . .

Monday, March 24

Egypt. Mons. Pariset—Salting & Embalming of the Dead.

At ½ past 6 a.m. went according to previous agreement to accompany Pariset at the Salpêtrière in his visit thro' the different wards of that establishment appropriated to the Insane. I arrived at 7 o'clock & found my friend had already commenced, having waited for me some time as I ought in reality to have been at the hospital at ½ past 6 instead of 7. He received me with his usual frank and kind manner most of the time conversing upon the projected expedition to Egypt with *Champollion* Jeune which seems to absorb all his thoughts. Indeed he says he sees nothing now in his imagination but *pyramids* & *plague*. I do not recollect if I have more than barely alluded to you before what are the particular motives which have inspired Mr. Pariset with so ardent a desire to visit that country.

You must know then that he has lately (nearly a year since*) published in one of the Medical Journals of Paris an entire new theory of the origin and cause of Plague, the discovery of which he believes will lead to the total extirpation of that scourge. Mr. P. says its primitive location and birthplace is unquestionably Egypt & that the first appearance of the malady is in the year of Christ 600, i. e. co-eval with & posterior to the abandonment of the practice of *salting & embalming the dead* which had existed in Egypt from immemorial time. That this practice so unique in its nature & so peculiar to that country however absurd or useless it has seemed to other nations was founded upon sound & philosophical principles growing out of the peculiar circumstances under which that country is placed. According to the best estimate the population of Egypt from the remotest period of history has exceeded 14 millions or 6,000 to every square league. The yearly inundation of the Nile excluded the possibility of interring the dead within the limits of their territory. As they were therefore obliged

* In *June* last.

to keep the bodies above ground until they could be carried to those parts of the country remote from the river where its inundation did not reach, sanitary measures were rendered necessary to preserve them from decomposition & the dangerous consequences which would have ensued to the health of the inhabitants. For this purpose the common practice was to *salt down* the dead (especially among the poorer classes) in *nitre natrum,* or *natron* a substance which abounds in that country & which seems to have been providentially placed there for this purpose. The rich & more distinguished personages & especially their kings were preserved by the more costly processes of *embalment.* The excavations left in the rocky formations in the interior from which stone had been quarried for building & other purposes, were appropriated to the reception of the bodies thus carefully preserved from putrefaction. Hence the multitudes of mummies found in those places by modern travellers. Hence the total absence of all proof that any such disease as the plague existed during the long period that this usage was observed in Egypt. And hence the co-existence of plague in Egypt & its introduction from thence into Europe from the moment this practice was abandoned. It is remarkable & at the same time a most powerful argument in favor of this ingenious theory that every part of it squares so completely with fact & history. Mr. Champollion has told Mr. Pariset that in all the inscriptions he has translated upon the monuments & mummies of Egypt, not one word has yet occurred to lead to the supposition that the plague was known in that country during the time the practice of salting and embalming was continued. Mr. Pariset wishes to see with his own eyes the actual condition of the topography of that country & how far the bold speculation he has advanced may be controverted or supported by an examination and comparison of the state of the population, the face of the country, and its numerous antiquities.[107]

Monday, March 24, 1828[108] (continued)

I was greatly pleased with the comfortable situation in which the maniacs of Salpêtrière are placed & the kind gentle & persuasive mode of treatment adopted by Mr. Pariset whose conciliatory & affectionate manner towards them renders him every way qualified to replace his illustrious predecessor *Pinel* who first had the honor of introducing the moral system into the madhouses of Europe—the system which since that period has been universally adopted in every part of Europe as well as in the United States of America.

[107] Pariset finally went to Egypt and published his views in 1831 in a monograph entitled *Mémoire sur les causes de la peste et sur les moyens de la détruire.*

[108] Series 2, Vol. 11, 1828.

The wards of the more docile patients and which constitute much the largest no. are all spacious, admirably ventilated and lighted and constructed not only in a substantial but in an elegant manner and preserved in the most perfect state of cleanliness, (some of the floors even being waxed) except in the rooms of the idiots whose peculiar situation necessarily precludes the possibility of carrying this part of the system of internal police into complete execution.

The more violent are placed in comfortable and smaller rooms arranged in quadrangles of one story on a level with the spacious and pleasant courts which they enclose and upon which they open. These courts are secured by a handsome iron railing, one or two sides of each quadrangle being converted into covered walks and the interior of the court laid out in group plots.

It is unnecessary to add to what has been said in a previous letter, that the bedding is of the most comfortable description even in the rooms of the most violent, that chains are not used, that the patients are all furnished with excellent food, good clothing and not allowed to suffer from cold, that nothing is anywhere met with to shock or offend the feelings of the most sensitive philanthropists and that the only coercive means made use of and that seldom is the admirable waistcoat called the *Camisole* which I have already described to you. Indeed every countenance by its serene and cheerful expression, even in the few who were most vociferous and who appeared to be under some degree of excitement, bespoke in language that would not be misinterpreted the benign and salutory results of the enlightened system of treating insanity now everywhere adopted. . . .

Tuesday, March 25

After having passed an hour with Mr. Warden I continued on my route to my friend *Pariset* in the Rue Poictiers.

Tho' occupied with the council of the Academy of Medicine, he made me pass into his cabinet where he joined me after an hour and made me stay and talk with him on our projected voyage to Egypt until after 5 p.m. In this long and pleasing interview M. Pariset talked as frankly with me of his own personal concerns as if he had been intimate with me for years. He told me the story of his life which like that of all men who have raised themselves to a high rank in society by the force of their own genius, was full of interesting incident.

His parents being poor and living in an obscure village, an uncle, brother of his father who had no children, sent for him to come and live with him at Nantes & that he would educate & support him. The young

Pariset tho' but six years of age accepted the offer and worked with his uncle until 18 years of age, laboring as he expressed it to me with his own hands. He then came to Paris & there obtained a comfortable livelihood until at the age of 35 he resolved to undertake the study of medicine. In 14 months he completed his professional studies—soon after was sent to Spain by the French government on a commission respecting the yellow fever and on his return appointed to the Salpêtrière &c—again sent to Spain and on his return made Perpetual Secretary of the Academy of Medicine, one of the Supreme Council of Health &c &c. He is now 55 and as ardent and full of ambition and gaiety as a youth of 17.

He says the last great object of his ambition is to prove by a personal visit to Egypt the truth of his speculations on the origin of the Plague—that should he succeed in establishing his theory and in devising means to eradicate the disease, he will return and pass the rest of his life in tranquillity and retirement in his native village. The conversation turning on Madame Pariset, he spoke of her as a woman of superior understanding and frankly asked me if I did not find his eulogy just. I answered as I in truth thought but had not an opportunity of before expressing that I had formed that opinion of Mad. P. at our very first interview and was happy in having so favorable an occasion of making my sentiments known to her esteemed husband.

Mr. P. is sincerely anxious for me to accompany him and has arranged the whole plan of the commission which is to be composed of the following Mess[ieurs]:

Pariset
Des Portes
Girardin
Townsend
} *Champollion* Jeune

to accompany the French Army should Egypt be their destination & to go at a moment's warning.

Mr. P. says there will be no difficulty about my being a foreigner—he will arrange all that with the government—our expenses to be paid which I told him was all I should ask.

Why Mr. Pariset should have thought proper to bestow such flattering marks of attention upon me I cannot tell, not certainly for my merits but rather I should think from having conceived a predilection in my favor from our first acquaintance, probably from finding me so frank and open in my manners and so zealous and resolute in my opinions, a temperament entirely congenial to his own. Whatever be the motive and however

warmly I may have expressed myself in defense of the doctrine he espouses on yellow fever I cannot but consider his deportment towards me as among the most honorable and grateful testimonials of friendship I have ever received.

In the evening I had according to previous arrangement a visit from Mr. Pariset who though he had been to dine with the Prefet M. Chabrol left there to come to my apartments. *Chevreul* & *Desportes* also did me the honor to be of the party. We conversed particularly on the subject of my intended communication to the Academy of Medicine respecting the much disputed question of yellow fever. Other matters were also touched upon. Mr. Chevreul brought with him a number of candles made after the process discovered by him and *Gay Lussac* for which they had procured he told me a patent. They are composed of a preparation of tallow purified and crystalized (sic) in such a manner as to have the transparency, whiteness & hardness of wax candles, with a clear brilliant flame and superior even to that kind of taper by not running as they melt. He regretted having published the discovery when he made it two years since without procuring a patent at the time.

Mr. Chevreul knows Sir Humphrey Davy intimately and told me that when he was at Paris he had experimented in his laboratory at the Gobelins.

The question of Sir Humphrey's pretensions being brought upon the carpet, Mr. Chevreul said he considered him a chemist of the first order and a man of splendid abilities predicating this opinion upon the discoveries of Sir Humphrey Davy on the subject of *Flame,* which he placed in a higher rank than those of the new metals.

He said this great chemist was always successful in his speculations which was another proof of his extraordinary genius. Mr. Chevreul is a member of the Royal Society of London, the highest honor he says he has ever received, much more esteemed by him he declared than that of being a member of the Academy of Sciences of Paris—the more so because he was chosen to the Society of London without any previous intimation, on that account the more flattering and agreeable to his pride.

While *Chevreul* & *Gay Lussac* were walking on the quay this afternoon on their return from the country, the latter Mr. C. said called his attention to a Gascogne whom G. L. said he had constantly seen in the same place and whose occupation consisted in exhibiting dead birds which he carried with him and which he assured the throng who gathered around him would not come to life until he told them to—which of course he took care not to do, thus keeping his word & duping the fools who gave him their sous for imposing upon them such a stupid hoax.

Mr. Chevreul told this anecdote as an illustration of the impudence of the people of that part of France. He said it was the same trait which made them so successful in attaining some of the highest honors in the gift of the government, more particularly there, he said, than in learned societies as they were not generally remarkable for their erudition or science.

Mr. Pariset had told me today that Mr. Chevreul was wery well off and had a wife and children. He is very fond of angling as well as Sir Humphrey Davy—and asked Mr. Pariset whether there was good fishing in the Nile. Mr. C. has a remarkably clear and slow enunciation which with his agreeable voice and smile made it quite a pleasure for me to listen to him. My friend Pariset speaks with so much rapidity that I sometimes find it difficult to follow him. Des Portes however is slow and emphatic in his enunciation and seems to have something of a brogue, but why I do not know.

It was concluded after our consultation that in my intended communication it would be advisable to abstain from all personal allusions or controversy.

Sunday, March 30th

Busily writing all day and arranging my memoir on yellow fever for the Academy of Medicine.

Monday, March 31st

Mr. Brown our American Ambassador called to see me. Also Mr. *Dumont* son in law of Mr. Pariset (his wife being deceased) & a practising physician of Paris. He studied 8 years under *Dupuytren* who is his first cousin & of whom he has an exalted opinion as the most profound and skillful surgeon of this, or any part of the world, tho' now at variance with him. Mr. Dumont said *Lisfranc* was a coarse savage illiterate fellow who had been a common soldier and had pushed himself forward by noise and impudence. Advised me never to perform the operation which I had seen Lisfranc do the day of cutting off the neck of the uterus. That it was a barbarous experiment and whatever Lisfranc might say to the contrary almost always fatal and that like many other bold and violent surgical operations now in vogue in Paris practised by certain men *ad captandum* and to obtain celebrity.

I was delighted with the whole of this young physician's conversation, not yet thirty years of age, tho' one would say from his corpulent size and grave countenance that he was nearer 40. It was highly instructive and full of sound logical reasoning. Of *Richerand* he spoke most contemptu-

ously as a bungler. Of *Larrey* he seemed to have but an indifferent opinion. Deprecated the bold experimental surgery of *Roux* who he said was guilty of murder in the operation I saw that gentleman perform some few weeks since and positively declare that the two ends of the intestine in that fatal case were not *affronted* [?] as the dissection had demonstrated and that the young woman therefore enjoying the best of health (with an artificial or vaginal anus it is true) owed her death to the hands of the Surgeon.

I found indeed that Mr. Dumont had but a very indifferent opinion of the surgeons in general and particularly of the older members of the profession in Paris with the exception of *Dupuytren* who he said was neither empiric or charlatan. These remarks were extended also to the Professors of the *Ecole de Médecine* generally who he said were with the exception of Orfila & one or two others the worst samples of the profession in Paris that could have been selected. He thought the older members monopolized & engrossed too much.

At 6 p.m. *Pariset* & *Champollion* together with Dumont & Mr. Caines & Mr. & Mrs. Moulton came to dine with me. We sat down at about 7 to a charming dinner prepared by Madame Mazio, the hostess of the Hotel de l'Europe where I have been residing for two months and the party seemed highly gratified. Mr. Champollion was on my left and Mr. Pariset on my right. Mess. Caines and Moulton kindly assisted in serving out. We did not retire into the sitting room until after 9 & the conversation at, as well as before and after dinner, particularly that of *Champollion* who took and kept the floor by universal consent and maintained it with a stream of uninterrupted eloquence rendered more impressive by his musical voice, his polished manner and brilliant elocution was the richest repast of antiquarian erudition I ever listened to. The all engrossing theme was as you may readily imagine his astonishing discovery of the entire alphabet of Egyptian hieroglyphics—on which & on all its bearings & relations (feeling as he did perfectly at home & in an excellent vein) he expressed himself in the most frank and undisguised manner both as respected his own personal feelings as well as of the opinions and labors of others. He said the whole discovery was accomplished in less than an hour, the moment he received a copy of the inscription on the Rosetta monument at London. Having been years pondering and meditating upon the subject, the instant the opportunity occurred of comparing the Greek, Coptic and hieroglyphic texts, the whole secret burst upon him like a flash of lightning. . . .

Champollion told me he was 38 years old tho' I should not have supposed him over 33. He is above the middling stature, of fine manly person

and erect figure, rather inclined to corpulency & with a face of mild and sweet expression, except when his dark large eye and the smile on his mouth are kindled with the fire of eloquence and his bushy brow knit with thought. I have seldom met with one more eloquent or with a voice more musical and captivating than that of this great antiquarian. The swell of his forehead is bold and his cranium of large measurement which with his swarthy complexion, a pair of fierce black whiskers and the imposing dignity of his carriage give him like many others of his countrymen from the southern & warmer provinces of France the look of a huzsar or grenadier rather than of a profound and deep thinking scholar. It would be difficult however not to recognize immediately the unequivocal marks of genius which Nature has imparted to his noble features.

He entertained us also with many details of his life, of his serving at Grenoble his native country in the war which preceded the abdication of Napoleon, of a large quantity of the bones of many species of animals which he assisted in disinterring in the south of France, some of which are described in Cuvier. . . .

There is nothing staid or buckramy in Champ[n]. He converses with as much naiveté on minor topics as on the most profound, always amiable, often sarcastic and humorous but never on any occasion forgetting his dignity. Champ. & Pariset each had his red ribbon in the button hole.

Champ[n] was the lion of the evening even to the exclusion of my friend the learned and interesting Pariset who like ourselves listened with the deepest attention and delight for many long agreeable hours to all that fell from his lips. . . .

Wednesday, April 9th[109]

In the evening Mr. Girardin who with Mess. Bally & Dalmas were appointed to report upon the memoir or résumé which I presented last Tuesday to the Academy of Medicine, came to see me that we might go over it together and thus be better enabled to make out a good translation.

Thursday, April 10th

(Addenda—What would you think of a delicate pretty girl of 12 years of age dressed in the most genteel and even fashionable manner with ostrich feather &c pulling up her clothes in midday in the midst of a crowd & on the corner of one of the most public streets facing on the quay, & squatting down with her legs & thighs all naked to piss against the side of the house while the mother stood by waiting for her. This we saw in the street

[109] Series 2, Vol. 12, 1828.

near the Louvre and the church of St. Germain L'Auxerrois on Sunday while returned from the Garden of the Plants the day Mr. Caines was with us—vide supra.)

Nothing material occurred today. . . .

Friday, April 18th

. . . Mr. Osborn and Mr. Adams called and afterwards Mr. *Champollion le Jeune* with whom I talked over our expedition to Egypt. He said that when we went he would take with him the great work published by the Scavants who accompanied the expedition of Napoleon and would then show me by comparing the plates of the hieroglyphics with the originals how inaccurate the former were.

In fact knowing nothing of the meaning and not supposing it would ever be unravelled, the *Institute of Cairo* were, as he remarked, exceedingly negligent in that part of their labours.

Mr. C. was as agreeable and instructive as usual but being unwell and quite low spirited I did not enter into the spirit of what lately so much interested me. . . .

Tuesday, April 29th[110]

Moulton & myself (availing ourselves of a ticket which my good friend Mr. Warden sent to me) went to the Rue du Bac No. 42 to attend the annual meeting of the Asiatic Society. . . .

Afterwards walked with Mr. and Mrs. Moulton on the Boulevards, went into a celebrated *cutglass* establishment there and then repaired to *Defours* in the Palais Royal to dinner. This is one of the most thronged and fashionable Restaurants in Paris & really deserves to be so for whatever dish you may order on the sumptuous bill of fare containing all the delicacies of the season that may be named & the choicest collection of wines and liqueurs whether it be truffles, champignons, beefsteak (which is now brought to great perfection in France particularly at this house) plum pudding, asparagus, lobster,* green peas, artichokes, mock turtle (which the French do not yet know how to make) Champagne, Bordeaux, Madeira, Curacao d'Hollande, preserved apricots &c, you are always furnished with an abundant quantity of the best quality in the neatest style—to say nothing of the attendance which consists of numerous waiters of the most obliging & expert description who have the additional advantage of being remarkably clean in their persons a thing not found at every place of this kind.

[110] Series 2, Vol. 13, 1828. Pages 9–42 torn out, top of 43 torn off; pages 69–74, 89–92 missing.

* (Brought from Caen & resembling the West India Lobster. Not near as delicate a meat as ours at New York.)

After finishing my dinner (it being now about half past six) jumped into a cabriolet on the stand by the Palais Royal near the Rue Vivienne & proceeded through the Rue Eustache to the Boulevards and thence to the *Theatre of St. Martin. . . .*

Wednesday, April 30th

Went to the Ecole de Medecine to see Dr. McMahon the Librarian whom Mr. Warden recommended to me to learn where I could find a suitable person to translate into French some pieces which accompany my memoir on yellow fever presented to the Academy of Medicine. Passing through the large room of the library which was crowded with students intently employed at their books, I found the Dr. in his private bureau and was very politely received. He is an Irish physician and very much of a gentleman. By his grey hair I should presume he was not much under 50. It is certainly no little compliment to his talents to be employed in so important a trust by a Foreign Government. He told me there were about 30,000 volumes in the Library. Inquiring of him if there were many foreign works he said a large number but what was strange nothing from *Spain.* I should have supposed Orfila, one of the most distinguished professors of this Institution and a Spaniard, would have himself repaired this defect in seeing the literature of his native country better represented in the greatest medical school of Europe. Speaking of Dr. *Hosack* he showed me his two volumes of medical essays presented by that gentleman whose peculiar autograph on the title reminded me of home and of my old preceptor.

Dr. McMahon indicated to me as a fit person to undertake what I desired a young physician who is connected with the direction of the *Museum* of the School, a Mr. *Thillaye* whom he brought to me and introduced. This gentleman had been a prisoner some years in Scotland and in this manner had acquired a good knowledge of the English language. After making an arrangement with him to call on me on Friday at 7 a.m. I walked into the Museum where I again had occasion to admire its admirable collection of specimens in casts of wax and plaster—among which the most remarkable are a suite of *lusus naturae* in the state of foetus, some with two heads, others without any cranium at all, some with but one eye; others were shapeless masses of flesh with teeth and other deformities sprouting from the surface and pullulations in lieu of extremities, the whole calculated to produce the most disagreeable impression upon the mind and to give rise to reflections not a little humiliating to the pride of those who are accustomed to associate in the imagination the human form divine with the beau ideal of grace and perfection. Besides these there is a collection

equally curious and extensive of the most remarkable phenomena of morbid anatomy, particularly tumours of the bones or soft parts of incredible dimensions and of grotesque shapes and c̄ malformations and distortions of every variety &c.

In two of the rooms of the Museum, candidates for degrees were undergoing public examination, many of the students being in attendance to have a foretaste of what they themselves must undergo when they should feel themselves sufficiently advanced in their studies to have the resolution to submit to this ordeal. The examiners consisted in each room of a council of three persons, two of whom were professors, one an *aggregé* or adjunct, my friend M. Girardin who recognized me in the crowd being one of the latter and accoutred like his older associates in a formidable red tunic.

The two professors who were interrogating the candidates while I was there were *Orfila* and *Dumeril,* the former of whom I was surprised to find with a smooth bald head of fine dimensions and shape and with scarcely a lock of hair upon it, notwithstanding the fine head of black curly hair which I saw him lecture in and which I had supposed was natural and which by the by was removed at this time, perhaps to be more in keeping with his red cap and official robes and to produce a more imposing effect upon the spectators.

From the School of Medicine I went to *Noel's* celebrated Lithographic Establishment in the Rue Vaugirard opposite the palace of the *Luxembourg.* Madam Noel, as I took the stout and handsome lady to be who seemed to be the chief clerk or head of the bureau in the absence of Mr. N., received me with marked civility and kindly opened to me the portefeuilles which contained the chef d'oeuvres in this immense collection. After selecting near a hundred which I intend to send to my brother Sol, I requested her to put them aside until I should call on some other day to complete the catalogue. They do not usually sell their productions at this place as it is the *Imprimerie,* the depot being in the Rue Virenne to which she recommended me. Dined at Defour's. . . .

[Several pages of diary have been torn out following the April 30th entry, making the allusion under May 5th to a "calamity" unintelligible to the reader. Later, in the entry of June 29th, the situation is again mentioned as a "domestic misfortune."]

Monday, May 5th

At ½ past six went to the Salpêtrière to breakfast with my friend Pariset. As he had nearly finished his visit by the time I arrived I did not go into the wards to meet him but waited in his room till he came. He

received me as usual with great kindness—talked but little and appeared to be totally absorbed with the Egyptian expedition which I find he is more and more sanguine will take place. He says Count D'Hauterive is still averse to sending a commission of medical men for reasons I have already given but prefers that Mr. Pariset should himself fulfil the object proposed without however objecting to his being accompanied by one or two persons as auxiliaries to him. Mr. P. asked me after what had happened to me if I was still seriously disposed to go. I told him certainly and even more so on that account for that I wish to banish from my thoughts as much as possible the calamity that had befallen me and therefore was the more ready to go into some distant country where the entire change of scene and the occupation I should have would divert my mind and withdraw my attention from associations which now constantly torment me. He then told me to be contented and that I should go with him. I told him it was not from mercenary motives that I was ambitious of the honor but that I would cheerfully go with him as his friend and companion and render him all the services in my power tho' placed in the subordinate situation of an auxiliary. He thanked me and said he perfectly understood how to arrange it all—&c. Being busily occupied with two memoirs on the subject which he has been advised by Count D'Hauterive to draw up and present officially, the one to that gentleman and the other to the minister of the interior. I left him as soon as I had breakfasted and went into the Garden of Plants and ascended into the Cabinet of Mineralogy where I heard the conclusion of Mr. Brogniart's lecture on that branch of Natural History, having recently commenced his course at this place. . . .

Friday, May 9th

Called this morning at 11 o'clock on the venerable Lafayette. After waiting a few minutes in the chamber adjoining his bed-room he received me with the greatest kindness with both hands—recognized me and talked an hour or more in the most frank and courteous manner on a variety of interesting topics. Told me how delighted and happy he was to see my countrymen. When I said I thought we intruded in too great numbers upon him, he assured me that nothing gave him so much pleasure, that it was the only consolation he had in the necessity he was under of being removed so far from America and where he would prefer to live because it would be more congenial to his habits and feelings and his earliest and best associations—but that his family were numerous, settled here by intermarriages and that it would be difficult to transplant so large a colony in another country. . . .

Called then on my friend Jacquemont in the Rue Université where he is now removed. Had a long and agreeable interview. Talked of *Rossini, Lafayette, Martignac*[111] &c. Told me Martignac was a great whoremaster, eaten up with the venereal which he had had for years—that he was every night almost flirting behind the scenes with the dancers and figmantes of the French Opera. . . .

Tuesday, May 13th[112]

From the dinner[113] it being now near 10 p.m. and the fashionable hour to go to soirées (which never commence till 9) Mr. C. and myself went with Gen. Barnett to that of Gen. Lafayette which he gives every Tuesday during his residence in town at his hotel in Rue D'Anjou. There was quite a crowd present. In the course of the evening was introduced to the venerable Count *Destutt De Tracy,*[114] the celebrated metaphysician, at present quite an old man. He is of small stature and about the size and has very much the look and manner of the late Abbé Hauy(?). Unfortunately like many other hard students and scavants in France and owing also perhaps to the inordinate use of snuff in this country as I have before observed, his eyesight is almost gone. He wore a green shade and could not well find his way without being occasionally assisted. His manners like those of all the *real* old nobility of France have all the simplicity, frankness, and artlessness of a child.

We talked of *Dugald Stewart.*[115] He thought he had written some good things but that much of what he had published wanted perspicuity. I alluded to the critique the Count had long since written on Kant's philosophy[116] and which critique I had read many years in the Transactions of the Institute. He did not seem to remember with precision the substance of that paper.

Mr Jacquemont also introduced me to the Count's son Mr *Victor Destutt de Tracy* whose profile is the precise pattern of his fathers. He is a distinguished member of the Chamber of Deputies—thin faced (pitted with small pox) and tall figure with an intelligent eye. He is about 38. Also to the celebrated political economist *Say* who speaks excellent English, having as he told me been several times in England. He would be

111 Martignac was the most influential minister of the cabinet formed by Charles X on January 4, 1828.

112 Series 2, Vol. 14, 1828.

113 Townsend attended a dinner given by Sir Sydney Smith at which were present some 50 or 60 persons prominent in literary, musical, political, and social circles [G.R.].

114 A. L. C. Destutt de Tracy, together with Cabanis, systematized the philosophy of ideology. In fact, it was Tracy who introduced the term *Idéologie*.

115 Dugald Stewart, Scottish philosopher (1753–1828), pupil of Adam Ferguson and Thomas Reid.

116 De la metaphysique de Kant, *Mem. de l'Institut: Sci. Mor. et Pol., 4,* 549.

much pleased he said to visit America but it is too far. I was perfectly astonished when he told me he was 63. I should suppose from his manner face voice and attitude that he was about 40—tho' I believe he had a thin shade on of brown hair which probably helped to deceive me. He wanted to know particularly if there were any good American writers upon political economy. I told him not but that there were many statistical works—and that Pitkin's intended work (of which he had not heard) would probably be little else than a repetition or new edition of Seybert.

Benjamin Constant [117] was also present—quite full of spirits from the success of the Constitutional party with the Chamber and as I have before remarked of his quick movements and youthful face (tho' he has a stoop and a head of hair as white as snow) much younger in appearance than he is in reality. *Gen. Lafayette* received me very kindly and immediately asked me if I had succeeded in getting in the Chamber.

I was also introduced to M^rs^ *Gen W Lafayette* daughter of Count *de Tracy*—rather small and thin like her father but amiable and intelligent. Also to the Countess *Lasteyrie,* a round faced pretty and youngish widow daughter of Gen Lafayette—also to her daughters who are very handsome and exceedingly amiable.

The Lafayette young ladies were in *bead or blue colored silk* dresses, very tasty and simple. There were other ladies there—among them some of our own fair country women, Miss Laight and also Mrs. *Robert Hunter* (formerly Letitia Underhill, daughter of Townsend Underhill of Oyster Bay) an old school mate of mine, who tho' as pretty nearly and as young as ever (not appearing over 25) has a daughter she told me 16! ! !

Mr. Hunter is our consul at the Isle of Wight—is much fleshier than when at New York, having found his health much improved. He asked me to visit him at his residence in Paris and I also invited him to my quarters.

Mr. *Bradford* as usual was also there, a very handsome young American. The party did not break up till near midnight. . . .

Saturday, May 24—

. . . After this I went to the Salpêtrière to see M. *Pariset* whom I regretted to hear from M. Chevreuil had lost his little grandchild, his last and only heir. He is much afflicted but still retains his cheerful spirits and talks of his expedition. I told him M. Chevreuil had mentioned to me that the Committee of the Academy of Sciences to whom Chervin's documents

[117] Benjamin Constant was a liberal French politician. See the recent biography by Harold Nicolson.

had been referred would probably report in favo of granting this charlatan the annual prize. I proposed to M. Pariset fo ne to call immediately on *M. Gay Lussac* (one of the committee) to give im friendly counsel on this strange procedure and to make known to him how much the scavants of Paris had been duped by Chervin. I did not therefore stay long but set out for M. Gay Lussac's at his apartments at the Arsenal the other side of the river, a short distance from the bridge of Austerlitz—but he was not in.

In conversation with M. Pariset about *Lafayette,* Conte *Destutt Tracy* &c, the latter of whom he knew intimately, he said it had entered into the heads of those gentlemen the chimerical project of making such a form of govt for France as we have in the United States, but that however desirable that might be for his part he deemed it altogether impracticable and visionary under present circumstances. When I told M^r^ Pariset what Chevreuil had informed me, that the minds of the Committee of the Academy seemed made up to give Chervin the prize, he said it would be best to let them do as they thought proper and not condescend to make any further exertions to prevent them from being imposed upon. That if our efforts to stop the business at this stage of it should prove unsuccessful we should be laughed at &c. However, on my return home I determined to repeat my call on *Gay Lussac* in the morning.

Sunday May 25

Took a fiacre at ½ past 7 a.m. and arrived at the Arsenal at 8. The porter told me M^r^ *Gay Lussac* was doubtless in his laboratory *au premier numero!** This phraseology I thought might equally well be figuratively applied to the actual position which the distinguished chemist occupies in the temple of science. Ascending a flight of steps by a badly lighted but spacious stone stair case, I knocked at the door when an old man to whom I applied for M^r^ G. L. pointed me to a small room adjoining where I recognized the great chemist in his colored spectacles, an old grey frock coat and a small travelling bonnet such as is so much worn by the French within doors. He received me in the most unaffected and friendly manner and when I apologized for having called upon him without the formality of an introduction he told me that was of no manner of importance.

Then immediately explaining to him the object of my visit I told him I should have brought a note from M^r^ Chevreuil but had not formed the intention of calling until after I left the Gobelins. I found Mr. G. L. very reasonable and very much disposed to listen to me. I ran over as rapidly as I could the whole argument and urged the impropriety of the Academy

* i.e. in the first story No. 1.

of Sciences granting any premium or prize to Mr. Chervin for pretended discoveries in yellow fever from the improper interpretation that would be given to this grant particularly abroad where it would be erroneously supposed from the high character of the Institute that Mr. Chervin had solved the great problem of contagion. Mr. G. L. assured me that the committee did not attempt to meddle with that question at all, but that the money if given would be given as an indemnity to Mr Chervin for having expended so much of his property and time for several years in search of evidence which might ultimately help to elucidate the matter in dispute —that M. Chervin had made great sacrifices &c.

I told him that tho I was not desirous of putting myself in attitude of an opponent or enemy of Mr. Chervin nor disposed to mingle in an unpleasant controversy I nevertheless thought it a duty I owed my country and the cause of truth paramount to all considerations of private sympathy for Mr. Chervin's losses to say to Mr. G. L. & the other members of the committee appointed upon the application; that Mr. Chervin so far from having rendered any services which would tend to elucidate or solve the problem had undertaken his pilgrimage with preconceived notions and prejudices and that the communications or comments which he had collected (See the Report on the subject by the Academy of Medicine of Paris 1827) were designedly selected by him in such a manner and placed in such a point of view and shape only as to favor his own particular theory against contagion or importation—that so far from throwing any new light on the subject he had done all in his power to darken, misinterpret and misrepresent the true state of the question more than ever and that certainly it ought not to be the business of a body of men so learned and liberal as the Academy of Sciences of Paris to adopt any measure which might appear to sanction conduct like this. That so far as regards the United States of America I could positively affirm that Mr. Chervin had totally misrepresented the question of contagion, presenting only such testimony as would favor his own particular views and suppressing the greater part of the facts and evidence which went to prove the fallacy of his conclusions—that the opinions pro and con of two, three or 400 medical men along the sea board* argued nothing against the almost universally received belief prevailing throughout all classes of the community in our maritime towns as well as in the interior that yellow fever was a foreign and contagious disease—which opinion was positively demonstrated to exist by the fact that in all the different state governments having seaports

* Influenced by individual partialities and local prejudices.

there existed a well defined code of quarantine laws expressly enacted against the introduction of yellow fever and that these laws instead of being abandoned had within the last few years in the principal commercial states (New York, Pennsylvania, Massachusetts & Maryland) been made more severe and comprehensive in their provisions. That these laws so obviously detrimental to the interests of commerce in a country like ours depending mainly for its support on foreign trade would be immediately abrogated† if there did not exist this general sentiment and belief in favor of the exotic and contagious nature of yellow fever—for that in our country, being a pure representative government, every individual participated in the enactment, execution and repeal of the laws—that there was no *bas peuple, paysans or canaille,* that every citizen enjoyed in this particular equal political rights and that all with but few exceptions were sufficiently well educated in the rudiments of knowledge to read and write and perfectly conversant with the principles and prerogatives guaranteed to them by our constitution.

Mr. Gay Lussac thought it was too late to give a new direction to the intentions of the Committee who he thought it almost certain would make the grant of indemnity proposed to Chervin but which he assured me would be expressly accompanied by the proviso or qualification that such grant had no reference whatever to the supposition that M. Chervin had solved the question of contagion or noncontagion. He said the subject being one of a professional or medical nature it was not within the sphere of his pursuits and that he did not and would not presume to speak in a precise or positive manner concerning it.

He however seemed to think that the disposition which was shown in every country in the West Indies as well as temperate latitudes to ascribe yellow fever to a foreign cause, was in some measure an argument in favor of the opinion that it had in reality no actual existence!

I told him the same objection would apply to smallpox, measles and other specific contagions whose germs had existed from the remotest period of time and to which no one had pretended to affix any particular locality or habitation and also to plague and typhus which were known to be under certain circumstances capable of spontaneous development in any part of the earth.

He did not appear to be willing to admit that the constitution of the air in cities or in the country had any influence whatever, basing this opinion on the chemical fact which he said *he* had established that the

† (Especially as they are enacted by the different state governments, who in this respect are wholly independent of each other.)

elements of the atmosphere never varied in any respect whatever in their proportions, being the same in all latitudes, climates, seasons and situations. He did not however deny that the atmosphere might hold in solution or mixture other principles in addition to those which form its essential or constituent elements.

In all this reasoning* the *chemist* was more conspicuous than the *pathologist*. He had been of opinion that Humboldt disbelieved in the contagion of yellow fever. I then explained to him that in Humboldt's New Spain, Tome II, he would find that that gentleman had in fact formerly denied the contagion of yellow fever but frankly acknowledged that what had more recently occurred in Spain seemed to prove that the principle of the disease when of sufficient intensity to become epidemic is propagated by contagion.

When I regretted it was too late to present the facts I had in my possession, he said I might address them to the Academy and that according to the old saying it was better *late* than *never*. It was evident that attentively and politely as Mr. Gay Lussac listened to my remarks that they made but little impression upon him and that his mind was made up.

When I told him I regretted I could not express myself with such clearness in French he said on the contrary I did remarkably well, and when I apologized for the great liberty I had taken in calling on him in this informal manner he assured me that he esteemed it an honor. Upon the whole I was charmed with this interview and particularly with the mild amiable and unaffected manners of this illustrious philosopher.

At 2 P.M. I called on Mr. Dulong (another member of the Committee and President of the Academy of Sciences) at his house near the Garden of the Luxembourg. He lives in a good deal of style and Madame D. as I took her to be (a very polite but not handsome lady of about 35) received me courteously. She was in the salon in conversation with a young gentleman in the military dress of the polytechnic school who it appeared was more attracted with the conversation of the lady than with the aeronautic enterprize of Madame Ga?nerin who was to ascend about this hour today from the Champ de Mars.

Mr. Dulong shortly after came down when I explained the object of my visit and ran over pretty much the same ground as at my visit to Gay Lussac. Mr. D. is a small gray haired gentleman with a thin face and a squint in his eyes. He also appeared to have made up his mind and thought my mission too late [*sic*] although he was liberal enough to recommend

* Making all allowance for the deference due to his exalted rank.

me to address a letter to the Academy to be in time for the sitting tomorrow and that it might have some effect. I assured him that if the grant was made to Chervin it would be interpreted by the world into an adoption or sanction of his opinions by the Academy. He said it ought not to receive that interpretation for the motive would be expressed in the grant and that the question of contagion and noncontagion would be left precisely where it was before. That they could not help the improper constructions or inferences that the world might think proper to put upon their conduct. Mr. Dulong was not quite so mild but fully as determined as Gay Lussac in his intention of rewarding what he called Chervin's sacrifices.*

Monday May 26

Called at the School of Medicine and afterwards on Mr. Warden to accompany him to the meeting of the Academy of Science. I read to him my memoir on yellow fever which was the same in substance as that presented some weeks ago to the Academy of Medicine but now accompanied with all the necessary documentation put into French. Mr. Warden told me frankly he was a friend of Chervin and that the minds of the members of the Academy were pretty much made up in favor of making the grant.

The Academy of Sciences are I learn heartily sick of the subject of yellow fever. Their tables have been deluged with memoirs on contagion and non contagion and since the time the government under Villele turned[?] the fever at Barcelona and the *cordon sanitaire* which they had established there in 1821 into a political engine for revolutionizing and oppressing Spain, public opinion in this country from disgust perhaps at this hypocritical course of conduct, has become very much disposed to renounce altogether the belief in contagion. It is now unpopular, unconstitutional and undemocratic to believe in contagion such is the consequence of politics and especially those (?) of Villele having been mixed up with this question.[118]

I had not mentioned Chervin's name at all in my memoir, merely presenting in a candid appeal to the good sense of the Acad. a series of conclusions supported by what I conceived to be unassailable evidence. I

* Before I went to Mr. Dulong's I called on my way at the School of Medicine to see Mr. *Thillaye.* The Museum of Anatomy was filled with students and visitors, several of the latter *women* and soldiers. As to military men it was perhaps in line to look at the mutilations of the human figure, but what but the insatiable thirst of female curiosity could have led persons of that sex to a place like this!

[118] This is a very revealing passage. It indicates clearly how closely scientific medical matters were intertwined with political affairs, a situation which has occurred more than once in the history of medicine and science and is not unknown to our time.

avoided personal allusions to Chervin, not wishing to make enemies as the tide sets in his favor but willing to leave my communication to stand or fall of its own merits.

At 2 P.M. we set out for the Academy—I waited in the Secretary's room for Mr. Dulong to arrive. In the meanwhile met there Mr. *Bertrand* the interesting young physician whom *Pariset* had brought to see me but whom I had not seen since. He seemed to take much interest in me, said he should have been to see me and should have availed himself of my polite offer to send a letter of enquiry concerning *Rachel Baker* (the Somnium girl who appeared some years since at New York) to Dr. Mitchill, but that sickness in his family had prevented. Mr. Bertrand told me he regularly took minutes of the proceedings of the Academy of Sciences for the Globe newspaper printed at Paris.

Mr. Dulong shortly after came in when I gave him my memoir. It was afterwards presented among a number of books, letters &c when the [session was] commenced by the perpetual secretary *Cuvier*. When my memoir was mentioned Mr. Dulong stated it was in manuscript and referred it to a select committee Mess. *Dumeril* & *Magendie*.[119] At this meeting Mr. Chevreuil afterwards read a report on a chemical work which had been referred to him and Poisson read a mathematical paper confirming some position of the late Laplace. Mr. P. however whom Poisson had referred to and who had doubted the correctness of Laplace's opinions made a verbal rejoinder. The society then going into a private committee the corresponding members and visitors returned. I had been downstairs shortly before to speak to Magendie whom I had seen go out. I overtook him in the court and addressed myself to him as the person whose memoir had been referred to him and Dumaril.

Mr. *Townson* he said I presume taking off his hat which I did likewise and both holding out hats in our hands in the open air French fashion.

I found Magendie a very warm partisan of Chervin. Mr. Warden had told me as much. When I told Magendie if they granted the money the world would say they adopted Chervin's opinions, he said very abruptly and passionately that ***was their business not mine*** at which I was much provoked and on the point of saying something pretty sharp to him but subdued my feelings for policy sake. I told *Magendie* I was not Chervin's enemy or opponent but I deemed it my duty to present what I conceived to be the true state of the question concerning yellow fever so far as related to my own country, for that Chervin had misrepresented us &c. I

[119] François Magandie (1783–1855), the famous physiologist.

was willing they should give Chervin what they thought proper & would give him something myself if necessary. He again here quickly and pertly replied that concerned *me* & Mr. *Chervin* not the Academy! However I governed my temper [?] but will take another opportunity to rebuke Mr. Magendie in a manner that he will be made to feel & remember. I then told him to prevent any improper interpretation being put upon my interference I would withdraw my paper until they had made (as he said they undoubtedly would) the grant to Chervin. He said that would be the most proper course and here my gentleman seemed a little staggered and brought to a proper sense of politeness (his hat tho' still off) by my gallantry. He said he should not be at leisure to examine my memoir under 15 days but Mr. Dumeril perhaps would be. We here parted. I was a little provoked afterwards to learn from Mr. Warden that both *Gay Lussac* & Magendie speak very *good English! ! !*

In leaving me therefore to explain myself in the awkward manner I did (purposely & wickedly perhaps on the part of Magendie, a little busy pock faced fellow who by the by may be said to have committed more wanton murders on innocent animals than would compensate for the few physiological discoveries his brutal experiments have led to) they both unwittingly paid a compliment to my knowledge of the French language. Mr. Warden then accompanied me to Bessour's in the Palais Royal where I gave him a handsome dinner. He then went with me to the *Cafe Hollandais Americain* that I might introduce him to *Capt. Jno. Le Conte* whom I generally smoke my cigar with there after dinner. . . .

Saturday June 28th[120]

Mr. Pariset called for a few moments to ask me to come to breakfast with him at the Salpêtrière on the following day, but could not stay to sit down as the Baron Cuvier who was with him was waiting below. He was delighted with the letter I had received from Dr. *Hosack* refuting Chervin.

Sunday June 29th

Went to the Salpêtrière and took breakfast with my friend Pariset at 8 o'clock and passed several hours with him. He is very anxious to have me accompany him to Egypt though he cannot arrange it so as to have me nominated on a commission with him as the want of funds prevent the government from sending any person but himself though they may have allowed him to take four or five young men with him as assistants

[120] Series 2, Vol. 16, 1828.

who however do not constitute a commission but are entirely subordinate to him, he having supreme authority over them and liberty to dismiss them if he sees proper. He says it will be much less expensive for me in Egypt than at Paris and says I must go as his friend and he will procure a passage for me from the government in the same vessel with him and that after our arrival we shall travel together. I consented to accept his kind proposal and if he succeeds in getting me permission to go in the vessel with him I shall make preparations accordingly.

He recommended me to get our ambassador Mr. Brown to use his influence also with the minister of the exterior to procure a passage. Accordingly after passing through the Garden of Plants to look for a few moments at the Giraffe, the Bisons, Vultures, Eagles &c of that admirable collection, I took a fiacre and proceeded to Mr. Brown's residence in the Rue Varenne. Mr. B. received me with his usual urbanity but when I had an opportunity of speaking to him alone on the subject of my visit I found he did not enter into my views or rather was fearful if he applied for a passage for me it might be thought he was asking a favor on the part of our government and if he should be refused which he feared would be the fact (as it was an unprecedented case) he should be much mortified. I felt a good deal hurt at Mr. B's apparent indifference, particularly when I stated to him that my object was to make myself useful to my country and at the same time to banish from my mind by active employment and change of scene, the domestic misfortune which has caused me so much pain and mortification since my arrival at Paris.

I thought he might have felt some sympathy for me as an acquaintance if not as a countryman and that he might have also been flattered as the representative of our government with the high compliment which Mr. Pariset had paid me in soliciting me to accompany him on so honorable an enterprise. I assure you, my dear brother, my feelings were not a little dampened by this cold reception but it did not dishearten me; for I consoled myself with the reflection that such conduct was to be anticipated from a person of such narrow comprehension and limited talents and who with his acknowledged urbanity of manners is universally pronounced both by your countrymen here and at home utterly incompetent for the important situation he holds and which his wealth and relationship with Mr. Clay & not his merits procured for him. Nine tenths of his time by his own account is passed in dangling after the court as one of the *corps diplomatique* an occupation which notwithstanding the distaste he professes for it and the irksomeness of harnessing himself up as he expresses

it almost every week to appear before the king, is not I should judge from the tenor of his behavior about which he was sent here to negotiate, altogether so unpalateable to his aristocratic inclinations as he would endeavor to make his countrymen believe.

I shall remember Mr. Brown whom I have hitherto spared out of charity and from the civilities I have received from him, and shall henceforward do all in my power to proclaim his imbecility and incompetency and to obtain his removal.*

Monday June 30th

Nothing material.

Tuesday July 1st

I had written yesterday to my friend Pariset in detail of my interview with Mr. Brown. Calling according to previous arrangement upon Mr. P. this morning at his bureau of the Secretaryship of the Academy of Medicine in the Rue Poitiers, he told me not to trouble myself further with our ambassador, and that he would himself undertake to procure me the passage desired. Mr. Brown had said he thought Mr. Pariset was the most proper person to arrange it and that his influence at court was much more likely to succeed than any recommendations from him.

At the general meeting of the Academy of Medicine which took place at 3 p.m. I took my seat within the enclosure where the members sit and had some conversation with Girardin, Desportes and Bouillaud, the latter as I have before stated to you a very interesting and learned young physician.

Among others present were the Barons *Larrey* and *Desgenettes, Desormeaux* (a man of extraordinary development of the anterior portion of the cranium) *Adelon, Laugier*[121] who presided alongside of the venerable President Baron *Portal* &c &c. After the sitting was ended about 5½ PM I was introduced in the court below by Desportes to the Baron *Desgenettes*. The Baron has some ulcerous affection of the nasal passages which from the strong putrid odor exhaling from them renders it impossible to remain long near him. It is probably an old uncured syphilitic disease in which opinion I am confirmed by the scarifications or cicatrizations on the external part of his nose and which it is surprising from its

* Mr. Brown I found also a furious partisan of Chervin and very abusive of my preceptor Dr. Hosack, all which may have rendered him more disinclined to serve me. In the evening went to the Opera Comique—I was disappointed in the *Dame Blanche*, so much praised.

121 Stanislaus Laugier (1799–1872), French surgeon who devised an operation for treatment of tear duct fistula (1830) as well as numerous other procedures.

naturally small dimensions has not fallen a prey to the morbid action which is going on within. The Baron is a portly and rather short man with a capacious cranium but the most remarkable feature about him are his protuberant eyes which tho' not large have the sockets so shallow that the lids upper as well as lower project entirely beyond the plane of the forehead and face. This peculiarity Mr. Bouillaud told me had been remarked upon by Gall who instanced *Desgenettes* as an illustration of the development of the organ of memory of names, dates, places &c for which indeed he is celebrated, being in this respect a man of extraordinary and profound erudition. I asked him about the sketch of the likenesses of those who were with Napoleon on his return from Egypt but he had not heard of it probably from his not being (I think) one of the number who were in the frigate.

I afterwards accompanied Mr. Pariset and Mr. Desportes to a restaurateur near the Louvre where we were joined by *Chevreuil* & took dinner in a private cabinet.

Every Tuesday there is a party who dine together in this manner composed of the same whom I have frequently dined with at Mr. Pariset's in the Rue Poitiers before Madame P. took up her residence at the Salpêtrière in consequence of the death of her little pet, the infant of Mr. Dumont. . . .

Wednesd. July 2d

Called again by appointment in the Rue Poitiers upon my friend Pariset and had several hours conversation with him. I afterwards took him to introduce him to Capt. *Leconte** who he was pleased to find highly approved of my going to Egypt.

While at the Academy Mr. Pariset told me he had made arrangements to have Dr. Hosack's letter to me presented tomorrow so that the important information it contained relative to Chervin's misrepresentations might be more readily distributed.

At 5 PM I parted with my friend P. with the promise to call upon him in the evening at the Baron Portal's where he was going to dine and where he would announce me. I did not go till 9. Ascending to the first floor my name was announced by the servant while I followed on with my hat in hand as is usual at all these soirées in Paris.

Soiree at Baron Portal's

This venerable ornament of the medical profession received me very

*Of our Engineer Corps.

graciously as did also Madame his daughter who came immediately to me from the circle of half a dozen ladies where she was sitting. There were about a dozen gentlemen present, chiefly physicians and one or two old peers with white heads and most of whom were occupied at the card tables. Among others with whom I entered in conversation and whom Baron Portal introduced me to was Monsieur *Dalmas* who had lived several years, I was surprised to learn, at New York and spoke English very well. I had already known his writings on yellow fever. Mr. *Audouard*[122] whom I had also been desirous of seeing came in after me. He is a pleasant short little man of middle age and apparently in excellent health inclining to the freshness and embonpoint of an Englishman, which are to be ascribed perhaps to the active life he has led as a military surgeon. I spoke of his work on the yellow fever of Passage in Spain and of the copy which he had sent to the Medical Society at New York and which he was happy to learn had arrived safe as they had neglected he said to acknowledge it. He is not married he says owing probably to his having been so much on military duty. He was in the campaign of Russia and the last campaign in Spain.

M^r^ Audouard was one of the Commission to Barcelona and quarreled with his colleagues but did not apostasize from his opinion of the foreign origin of yellow fever which he still strenuously maintains. He laughed at the idea of *Pariset* going to Egypt and said there was no danger of his seeing the plague as he was too great a coward. He asserted boldly and told me he had published the same that Pariset had not seen the yellow fever while at Barcelona but had run away from it and hid himself. He asked Baron Portal how it was possible Pariset so deficient in courage was going into Egypt. Portal replied as he passed along with some energy (tho only in a whisper as he has lost his voice) that he thought Pariset did not want courage—M. Pariset had told me Portal was very friendly to him. Audouard was very particular in enquiring of some person who appeared to belong to the family if Pariset had dined there today and quite chagrined I thought to learn that he had not only dined with the Baron but was the only person who had dined with him.

There were two very pretty young married ladies there, both in white dresses and bonnets and ostrich plumes of the same color which they continued to wear at the card table.* The other ladies were some of them in

[122] Mathieu François-Maxence Audouard (1776–1856), concerned chiefly with the epidemiology of malaria, yellow fever, and plague. Townsend is probably referring to his *Relation historique et médicale de la fièvre jaune qui a régné à Barcelone en 1821*, Paris, 1822.

* One of them the wife of an Italian gentleman who goes out to Egypt with Mr. Champollion as an antiquary, being sent by his government.

pink and all generally wore dresses but little ornamented. The gentlemen were dressed in light colored pantaloons which seemed to be in vogue owing to the heat. The medical men here are not on such occasions so restricted in their costume as with us. At ½ past 10 a part of the company began to leave when I bade the Baron good night and received a friendly adieu from both his venerable hands and an invitation to come frequently to see him—to visit him again. He had previously asked me for my address. Madam Portal whom I took leave of on my way down stairs also politely invited me to visit them again.

At these soirées which are very pleasant conversation parties without the least restraint or formality there are no other refreshments than a little lemonade or currant juice and water.

Lafayette's is an exception and more *a l'Américaine*. There you find hot whiskey punch preceded by tea and coffee, cake, &c.

M. le Baron Portal now near 90 years of age told me he was and indeed he appears to be in excellent health. His eye is as bright and lively as ever and he moves about the floor smiling and talking as cheerfully as a boy to everyone he meets in the most unaffected and affectionate manner. The Baron is *Premier Médecin du Roi* and from his great age which exceeds that of any other member of profession, he is called in courtesy *le Père Portal*. . . .

Saturday, July 5th

Breakfast at 7 a.m. with my friend *Pariset* at the Salpêtrière. After which returned to my lodgings and between 11 and 12 went with my very amiable young friend Dr. Bouillaud according to an arrangement previously made between him and the celebrated *Gall* to be introduced to that illustrious physiologist. Dr. Gall lives in the Rue St. Honoré and in the ante chamber where we just entered I observed a long row of plaster casts on the wall among which were many of those criminals who have been guillotined and which are preserved also in the Museum of the School of Medicine.

The great craniologist tho' not yet recovered from a partial stroke of palsy which happened to him some weeks since had expressed himself to Dr. B. flattered with the request I had intimated to be introduced to him and accordingly received me in his saloon with great civility being yet unable to rise from the sofa where he was sitting or to articulate with as much distinctness as he would wish, the hemiplegia having affected the left side of his mouth and head and the right side of his body.

He was in deshabille with nothing on but his pantaloons and shirt owing to the warmth of the weather rendered more oppressive by the

humidity of the atmosphere, the rain falling at the time of our visit. As it fatigued him much also to talk we did not stay more than a quarter of an hour during which however he conversed very familiarly and affably (in French) upon the subject of his studies and discoveries. I told him how much his system was thought of and taught in the United States and how well he would be received in our country if he could find it agreeable to cross the Atlantic. He said he was too old and alluding despondingly to the affliction under which he was laboring added that the time was fast approaching he thought when he must prepare to visit another world than that to which I recommended him.

I was seated near him on the sofa and remarked that he eyed my countenance for some time very closely, shortly after which he said to Dr. Bouillaud that there was an *astonishing* resemblance in my head and in the whole expression of the face to that of the Duke of Wellington whom he was well acquainted with. The same thing was remarked by many persons in London when I was there in 1821 and 1822. So you perceive as I observed also to Dr. Gall that I have the consolation therefore to know that I have the physiognomy of a man who does not pass either for a fool or an idiot tho' I doubt much whether I ought to have the vanity to think that there is any analogy between the mind of that great captain and the interior organization of my cranium.

Dr. Gall thought also that in me as in the Duke there was a development of the organ of calculation or mathematics—I may say perhaps without exaggeration that I have always had a penchant for those studies tho' never an opportunity of indulging in them from my mind having been turned or rather forced it may be said by the profession which was given me into a direction altogether opposite from that perhaps for which nature intended me.

You perceive, my dear brother, how agreeable a topic it is to talk of one's self tho' I tell you all this more in badinage than seriously, feeling well assured that my egotism if you choose to call it so will meet with all due degree of allowance and forgiveness in the liberality with which you will interpret it.

Alluding to the head of Franklin and that of Napoleon, Dr. Gall spoke of them as you may well imagine in terms of approbation. He said his system was generally adopted and believed by those who studied it well and thoroughly understood it. I told him I felt well persuaded that his discoveries would go down to posterity among the remarkable events which characterized the epoch in which he lived.

He invited me on taking leave to do him the favor to visit him often before I quitted Paris. Dr. Gall is stout in his person like most Germans and rather above the middling stature. He is what would be called a *large man*. His head particularly about the forehead and temples is remarkable by the rotundity of its form and its capacious volume. You remember some warts on the left cheek which are always scrupulously represented in all the portraits of him. His nose is straight and the apex square or blunt and slightly cleft or bifid and partially turned up, one of the most peculiar marks in his physiognomy. The length of his face in proportion to the height of the cranium is I think greater than it is usually represented.

There was a fine and very accurate bust of him which I saw as we passed thro' the ante-chamber. In fact there is no better illustration of his doctrine than his own cranium and physiognomy which are characterized by peculiarities sufficiently striking and remarkable to induce one to presume a priori that his mind was organized or cast in a mould equally unique and original. . . .

July 17th Thursd

Went to the Salpêtrière at half past six and breakfast and passed two or three hours with my friend Pariset who said he was rejoiced to see me for he wanted to inform me that M^r^ *Hyde de Neuville* the minister of marine had personally assured him in conversation that the passage to Egypt should be granted to me and therefore that I must get ready as soon as possible to set out August 10th from Paris, as his note to me the other day informed me when he first announced the success of his application for me. . . .

Sunday, July 20, 1828[123]

Went to the Salpêtrière to dine according to previous invitation *en famille* with my friend Pariset. I found Mr. Pariset's bureau in the farther court shut and thence returned to the apartments in the building near the great entrance formerly occupied by Pinel where I found my friend at table with his wife and M^r^ Bosc, it being nearly six and thus so long after the hour I had promised to come that they had despaired of seeing me. Mr. Pariset received me as usual with great cordiality and also Madame, but he appeared withal somewhat sober and meditative with the thought of so soon parting with his wife for a country where he might perhaps find his tomb. He charged me to get my baggage ready to set off at a moment; [illegible] and talked much of Hosack, the yellow fever,

[123] Series 2, Vol. 17, 1828.

plague and the brilliant prospect we had of making a fine reputation in the contemplated expedition. We had for dinner a fine calf's head, beef steak, pigeons, excellent old Bordeaux and coffee and old Jamaica for me afterwards. When we had dined M^r^ Pariset and myself played a game at chess for the first time. M^r^ Guiot his pupil a fine intelligent young fellow whom I have before mentioned in the visit I made to the lectures in the Salpêtrière on my first visit to Mr. Pariset, coming in shortly after with a letter he had obtained the loan of, written by a young veterinary surgeon recently arrived in Egypt from Paris and in the employ of the Pacha, we laid aside the chess to listen to its details, calculated to interest us particularly at this moment as we had the prospect of soon realizing much of what he described. He speaks of the *fare* being cheap but *furniture* dear—the climate quite hot—plenty of negroes or rather mulattoes which color and class the Egyptians very much resemble—says the poorer classes even the females go almost naked &c—longs to revisit France his native country. . . . Soon after dusk took my leave of M^r^ Pariset and accompanied by Mr. Guiot as far as the gate of the Garden of Plants, jumped into a cabriolet as the driver was lighting his lamps and proceeded to my hotel.

Wedn. July 23d

Went to the mail poste Rue Rousseau at 5 p.m. to take leave of Mr. Pariset who goes by order of the government first to Marseilles (accomp^d^ by Mr. Guiot) to examine the epidemic prevailing there and afterwards is to repair to Toulon where I am to join him. . . .

[At this point about seven pages are torn off. The next entry is *Tuesday July 29th* when "nothing material occurred." The entries then continue.]

Wednesday July 30th

Mr. Darcet one of the members of the commission who go out with Mr. Pariset called on me while I was out and left a note to come as soon as possible to the mint to make arrangements relative to securing seats in the mail stage previous to our departure to join Mr. Pariset at Toulon. (I should have mentioned that on Tuesday July 22d I met *Desportes* in the Garden of the Palais Royal who told me Pariset had taken leave of the Academy of Medicine that afternoon and was to set off for Marseilles the next day. He expressed some surprise that I did not know of his departure and I myself must confess I was somewhat astonished he had not mentioned his intention when I dined with him the Sunday previous. I then told Desportes Mr. Pariset assured me my passage in the vessel with him from Toulon was secured. Desportes said this was not a sufficient guarantee

and that if I wished to go to Egypt I had better immediately call on Pariset. I told him I was not so particularly anxious to go as to make use of any extraordinary measures to secure a passage and that I relied on Mr. Pariset's promise. He said he had also relied on Mr. Pariset's word and that I well knew Pariset had promised him months ago he would not go to Egypt without him &c. On my return home I wrote to Mr. Pariset a note expressing a little surprise he had not informed me of his intention. The next day I received a kind answer as usual assuring me that nothing in regard to me was changed and that my passage was certain and that he wished me to come and take leave of him that day at the mail poste. This was Wednesday and shortly after I arrived there, he M. Guiot, M. Dumont & Mr. Bosc all came and received me with the usual cordiality. Mr. Pariset explained to me the misunderstanding by saying that it was not until Monday the day after I had dined with him that he had received orders to go immediately to Marseilles. Dumont told me to put no confidence in what Desportes had said and assured me that he & Mr. Bosc who would not set off from Paris until about the 6th of August would give me timely notice that I might accompany them. At this time it was still my determination to go—and Mr. Darcet's note proves to my great satisfaction that Pariset had been faithful to me.)

I wrote immediately to Mr. Darcet that letters which I had just received made it necessary for me to abandon the expedition to Egypt and return as soon as possible to the United States.

Thursday July 31st

Mr. Bosc came this morning early to notify me that he and Dumont would set off on *Tuesday* next and wished to know if I intended to accompany them or Mr. Darcet. He was quite sorry to hear that I had abandoned all hope of going to Egypt. . . .

Monday August 4th

Wrote to my friend Pariset a long letter in answer to one I received from him since his arrival at Marseilles. Explained to him the cause of my abandoning the expedition to Egypt. In the course of the morning my friend Mons. le Dr. *Gerardin* came to see me. Told me of the flattering report he was going to make tomorrow on my memoir on yellow fever sometime since presented to the Academy of Medicine. I told him he must not let his good feelings towards me unnerve the severity of his criticisms though I well knew the documents I presented were of high interest setting aside the reflections with which I had accompanied them. He told me he

had heard the expedition of Pariset had been countermanded which in fact I found confirmed in the *Courier Français* of this morning. I had mentioned indeed to several persons some days ago that there appeared to me something incompatible in the project of the French govt. of sending on one hand an army into Greece to drive out *Ibrahim* and on the other a scientific commission into Egypt who must naturally throw themselves upon the favor and protection of the Pacha of that country who is the father of Ibrahim. Still however I am inclined to believe that Ibrahim will quietly retire from Greece and that the French govt. in reality and secretly wish to make Egypt an independent government and to favor as much as possible the resistance of the Turks to the progress of the Russian armies. The scientific expedition of my friend Pariset may therefore be suspended but is not I think abandoned. . . .

New York December 17. 1828

(The above diary was broken off by my leaving Paris for New York Tuesday Aug. 12. The following is the continuation written at New York. PST.)

Monday August 11th

. . . My friend Dr. Bouillaud left a note at the hotel that he would call at 3 p.m. to take me to see Dr. *Antommarchi* & the *caste* [*sic*] *of Napoleon's face* in possession that gentleman taken by him at St. Helena after his death. Antommarchi as you may remember was the Italian Physician who attended that renowned exile in the last period of his illness. Dr. Bouillaud coming at the hour appointed I invited Mr. Caines and Mr. Osborne to accompany me.

We found Dr. Antommarchi at his lodgings in the Rue Rivoli* & were received by him with many expressions of civility. After a few moments conversation during which he spoke of the pressing importunities of many persons to obtain a facsimile of the caste and the sacred obligation he felt to refuse the pecuniary offers that had been made to him to exhibit this precious relic for purposes of gain, the Dr. took from off the table under the mirror a small oblong box of blue pasteboard which formed a part of the furniture of his room and which being unlocked and the top turned down presented the ghastly features in white plaster of the great Napoleon, the similitude of which to his portraits tho' not difficult to recognize was not so striking as I expected to have seen them. The face of course is greatly emaciated, the temples sunk in and the cheek

* In the Sixième, I think, being quite straitened in his circumstances.

bones very projecting, the fat under the teguments having been absorbed, and this left the forehead much narrower than any person could have imagined in examining the coins, busts and paintings that were taken during life and particularly during the time of his obesity shortly before and after his return from Elba. This last circumstance of the diminished volume of the front part of the cranium after emaciation and death (& which was the time at which the fairest measurement could be taken) has given rise to the scepticism which *Gall* (who closely inspected it) and other phrenologists have lately expressed relative to the extraordinary powers of mind which have been generally imputed to him.

Dr. Antommarchi declared however that it was a most faithful copy and we all agreed in [the] opinion that the resemblance was much stronger to the period when he was first consul than since. The nose is much longer than it is generally represented & also thinner. The mouth is partly open but still retains tho' in death the sweet placid expression by which it was distinguished in life. The cheeks are sunk down into the neck as tho' that part were swollen which proceeds from the posture of the body on the back and the relaxed state of the parts after decease.

As there are but few persons who have the rare opportunity of beholding this curiosity we gazed at it the more intently & the more so as it is quite possible it may not survive the lifetime of its estimable possessor who assured us with tears in his eyes that he would rather be overtaken by poverty than barter away for gain or allow copies to be taken for that purpose of the image of one whose memory and fame were dearer to him than any earthly gift.

In answer to some inquiries I made respecting the last moments of Napoleon he told me that for two hours before death though perfectly sensible he spoke nothing, desiring those near him not to harass him with questions. In this tranquil silent mood he passed into eternity with perfect resignation and without a sigh or groan. There being a written account of the last hours of Napoleon by Antommarchi we did not think it worth while to take the opportunity of this interview to pry any farther into this topic. Dr. Antommarchi has every appearance of having been worthy of the high and honorable mission with which he was entrusted as the physician of Napoleon. His countenance is handsome and expressive, his manners those of a gentleman and his conversation that of a well read and learned member of the profession tho' not yet I should presume over 35 or 40 at farthest. I recommended him to visit America and he thought it not improbable he might one day come. He begged me to convey his re-

spects to Joseph and to say he had been long expecting letters from him.

On taking leave we stopped a moment in the antechamber to look at the colossal plates of the anatomy of the human figure which accompany the great work on that subject which Antommarchi recently published and of which I have already made mention.

Tuesday August 12th

At 6 a.m. left Paris in the Diligence for Rouen accompanied by my friend and fellow countryman G. Seth Grosvenor of New York. . . . A few miles out of Paris we cast back a longing lingering look upon its domes and towers now illuminated by the rays of a beautiful sun which had not yet broke forth from the fog when we passed the barriers. . . .

Sunday August 17th

Embarked at 3 p.m. in the Charlemagne, Capt. Robinson, from Havre for New York and arrived Sep. 18th after a very pleasant passage. 130 Swiss, Germans &c in the steerage. 25 cabin passengers among them Mr. Abbott and family of charming children emigrating from England to America. Passed on the voyage innumerable quantities of *brigs*—harpooned a porpoise—went out in a small boat (it being calm) at the banks of Newfoundland—admired the beauty of our ship (her 2d voyage)—shot some Mother Carey's chickens—overtook the St. George, a beautiful race, our mate at the helm (Mr. Merry)—arrived the same day as the Canada from Liverpool—a victory. *Finis.*

An Early Prepayment Plan for Medical Care

The Thomsonian System of Botanical Medicine

WILSON G. SMILLIE*

SAMUEL THOMSON, born in 1769 in New Hampshire, developed a "Botanic System" of medical care during the early part of the nineteenth century which swept the whole nation and which endured for many years. Furthermore, he developed a plan, on a voluntary local community basis, for prepayment of medical care with formation of "Friendly Societies" in each community. These groups provided for exchange of home nursing care, interchange of therapeutic information, and also exchange of actual remedies.

Thomson had little use for the practising physician. He was frank to admit that he had had no formal medical training. "The way to become a fashionable physician," he notes, "is to spend three years reading physic, then receive a degree and diploma from some medical society, the time is spent in learning Latin names of different preparations, with names, colors and symptoms of all kinds of diseases, and a sufficient knowledge of the nature of medicine to know how much poison can be given without causing death."

He objected strenuously to the medical practice then current of treating disease by bleeding, by blistering, and by administering mercury, arsenic, nitre, antimony, opium, and other poisons. He also objected to the system of practice then employed "Because people are kept ignorant of everything of importance in medicine, by its being kept in a dead language [Latin]."[1]

Thomson believed that radical surgery, particularly amputations of infected legs and hands, was a pernicious procedure, and he had little faith in the use of caustics for cancer of the face and the breast. His method of treatment was based, for the most part, on the use of "simples such as would promote digestion and aid nature." The "system" consisted of numbered secret botanical prescriptions. Number *one* was an emetic herb to clear the stomach. Number *two* was a drug to aid digestion. Number *three* was intended to act as a purge, in order to clean the bowels of mortifi-

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[1] Samuel Thomson, *New guide to health*, 1822. Printed for the author and sold by him.

cation, and so forth. As time went on, higher numbers up to seven or eight were established. He was a firm believer in the value of sweating, which was produced by steam baths and hot applications.

"Doctor" Thomson had no medical degree, nor did he receive any formal medical training. He learned medicine the hard way, through trial and error, in the bitter school of personal experience. He was a farmer's son, who had had to work very hard while still a small boy. Thus he took a great dislike to farm work. Dr. Kitteridge, a community root and herb doctor, treated this farm boy when he was nineteen years old for a seriously infected axe wound of his leg with excellent results. The young man decided to take up the profession of herb doctoring seriously, and began treating his neighbors with herbs and roots that he gathered in the woods. He effected remarkable cures. Often persons who were given up as hopeless cases by their physicians would come to him as a last resort, and would recover after he had administered his secret remedies.

As he became more successful, he aroused the jealousy of physicians. A Dr. French was a redoubtable enemy who made life miserable for young Thomson and finally had him thrown into jail and tried for willful murder of some six persons. Thomson's friends and patients came to his aid and he was vindicated and released from prison. The next year Dr. French was himself in jail for robbing a graveyard of a dead body which he had sold for sixty dollars.

Samuel Thomson possessed great energy and complete self-confidence. He was physician, nurse, midwife, and pharmacist—gathering, preparing, and administering his special remedies. He travelled the country over and often was in danger of his life. He soon demonstrated that he had a genius for organization. First he developed his system of treatment, then went to Washington, just after the city had been burned by the British in 1813, and secured a patent on his various secret prescriptions. All the drugs that he used were plants, roots, and herbs. Number one was his great standby, for it was a very strong and effective "puke." He also developed a system of massage and used steam and hot baths most effectively. At first he sold "rights" to individuals in the various communities. These "rights" gave a family the privilege of using his method of treatment. Finally he evolved "The Friendly Botanical Society" with chapters in each town. Every family which purchased a "right" became a member of the Society, and thus was entitled not only to the medicines, "but all the privileges of free intercourse with any one who has bought a right; to con-

verse, to receive, and to give instructions in sickness, when called upon by another member."

The Thomsonian system spread throughout the New England states, then down into New York, and west into Ohio and the hinterland. Thomson and his followers had great difficulties with physicians, and he also had trouble collecting his fees and commissions from his widely scattered agents, but he possessed the secrets of the several prescriptions and was able to reap a harvest through the sale of medicines. This grew to such a business that he speaks of purchasing Cayenne pepper from Madagascar in three-ton lots.[2]

The Thomsonian system finally became so popular that the Friendly Societies were established "in all of the States and in Canada," and many reputable physicians gave up the use of heavy metals, bleeding, and blistering, employing instead botanical remedies more or less in accord with the Thomsonian system. In order to combat Thomson, the Medical Society of New York State was able to get a bill passed in the legislature in 1820, depriving all but physicians of the right to practise medicine as well as the right to administer drugs. The Pennsylvania legislature passed a similar law, but Governor Schultz "put a stop to it, for which he is entitled to great praise." (Thomson had treated Governor Schultz's family free of charge.)

[2] Thomson in 1822, published a ***New guide to health: or botanic family physician*** in which he gives some of the secrets of his method of treatment and discusses the nature of the numbered prescriptions.

"Number 1 is intended to Cleanse the Stomach, overpower the Cold and promote a free perspiration." It was the tincture or dry powder of an emetic herb, *lobelia inflata*. He discovered the properties of this plant, by chance, as a small boy.

Number 2 was intended to retain the vital heat of the system. The basis of this prescription was Cayenne, or Capsicum. He gave very large doses —up to a teaspoon of the powder taken in sweetened hot water.

Number 3 was intended "to scour the Stomach and Bowels, and remove Cancer." Many herbs and roots were utilized: bayberry, white pond lily root, hemlock bark, marsh rosemary root, sumach bark, leaves, and berries, etc.

Number 4 was "Bitters to correct the Bile and restore Digestion." A great many different plants were used for this prescription: balmony, poplar bark, golden seal root, etc.

Number 5 was a "Syrup for the Dysentery to strengthen the Stomach and Bowels."

Number 6 was "Rheumatic Drops to remove pain and prevent mortification." The essential of number 6 was the meat of peach stones, or wild cherry stones. A cordial was made of the seeds, with hot water, loaf sugar, and brandy. Gum myrrh and spirit of turpentine were used in this prescription. *Good brandy* was an important ingredient. In addition many accessory vegetable compounds were utilized, such as a nerve powder of dried ladies slippers, spearmint, peppermint, pennyroyal, hoarhound, tanzy, camomile, etc.

Thomson gives sage advice concerning methods of home treatment, with specific directions for the family medicine chest and general directions in curing or preventing disease.

A stock of medicine for a family for one year, "which will enable them to cure any disease, with which a family of common size may be afflicted" was as follows:

1 oz. of the emetic herb (Lobelia powder)
2 oz. of Cayenne
1–2 pounds of bayberry root bark
1 pound of poplar bark
1 pound of ginger
1 pint of rheumatic drops.

The medical profession was Thomson's worst enemy and it found him a formidable antagonist. His description of a family physician during a community epidemic, of fairly obvious typhoid fever, must have caused many a physician to grit his teeth in ineffective rage.

A child is taken with the belly-ache. The family doctor is sent for, who pronounces its disorder to be worms, gives calomel and jalap to destroy them, which reduces the child very much. The next visit, bleeds it, to lay the fever, then gives it a fever powder composed of nitre, opium and camphor, once in two hours. The patient now lays in a stupid, senseless posture, with crimson spots on the cheeks, denoting putrefaction. The doctor is again sent for in haste, who now pronounces it to be the putrid fever. The bleeding is repeated, and the fever powders continued. The nerves become convulsed, and the doctor is again sent for, who pronounces the disorder to be the putrid nervous fever, and that it has become contagious; the child dies, the family, worn out with fatigue, and being much alarmed, begin to become sick, and by the time the corpse of the child is interred, are all down with the disorder. The doctor now has much employ, the neighbours are called in to watch, the putrefaction runs high; the neighbours, one after another take the disorder, and return home sick; the doctor is called, business gains rapidly in consequence of the same treatment, until the fever has gone through the whole village. All thank the doctor for his incessant attention and kindness; and he boasts of wonderful success, having lost but fifty out of one hundred and fifty! His bill is paid with the greatest satisfaction. By this time the doctor can build his house without sitting down "to count the cost."

What is the cause of all this village sickness? A child was taken with the belly-ache; and had no doctor been known, the mother, with one gill of pepper and milk, could have cured the child, and saved all this slaughter of the scourge of a family doctor.

Thomson's "Proposals for a revolution in the practice of medicine" has a most modern and familiar ring. It contains a particularly valuable suggestion: that the Society member who insists that he is ill, and demands medical attention in order to get full value of his pre-payment policy, shall be compelled to take the full course of treatment—including Number one, the very efficient "puke."

THOMSON'S PROPOSALS FOR A REVOLUTION IN THE PRACTICE OF MEDICINE

People have paid doctors for being sick, for about four thousand years. Let them now turn about, and pay for their health, which is much more reasonable. Let the doctor enter into contract with the head of a family, to keep the family in health, for a certain sum, for each member of the family, for one year; conditioned that for each day's sickness in the family, by any member thereof, the doctor, shall forfeit twenty-five cents, to be deducted from the sum agreed upon. Hence all the account there is to be kept, is, the number of days of sickness there is in the family, in order to know what amount there is to be deducted from the sum agreed upon. And to prevent any imposition on the doctor, by the family, anyone saying: 'I am sick', to save twenty-five cents; the doctor must be called, and they must go through a *regular course of*

> *medicine,* or else not have any allowance made for their sickness. But if they comply, the doctor must not only attend them for nothing, finding his own medicine, but also pay them twenty-five cents for every day they are sick; to be deducted at the end of the year, from his salary.

As Thomson so sagely remarks: "Were this plan generally adopted it would save nine tenths of the sickness of our country."

The author humbly takes off his hat and makes obeisance to Sam Thomson, the greatest *quack* that America ever produced. He was a most remarkable man, with many admirable qualities and progressive ideas. How the doctors must have hated him! But he had a profound influence in modification of the drastic therapy of the day and was largely responsible for the early legislation in many states requiring that all practitioners of medicine shall possess a state license which is secured only after demonstration of at least a minimum of medical knowledge and professional competence.

Notes and Queries

Edited by Ralph H. Major, M.D.*

Seventeenth Century Dutch Writers on Tropical Medicine and Tropical Herbs

Though the Dutch had settlements in the East Indies and on the main continent of India from the first decade of the seventeenth century, and though the East India Company had factory surgeons and ship surgeons even from the beginning, only a few names are known to the history of medicine. The earliest writer is Jacob Bontius (1598–1631) whose pioneer work on tropical medicine, *De medicina Indorum*, was published in 1642. This was followed by another celebrated book, *De Indiæ utriusque re naturali et medica* (Amsterdam, 1658), written by Willem Piso (1611–1678).

Most of the records of the Dutch factories in India in the seventeenth century have disappeared from India. But there are two valuable accounts which should be studied very closely. The work entitled *"Description of Malabar, Coromandel and Cochin"* written by Phillip Baldaeus, a chaplain to the Dutch forces, and published in 1672, may throw some light. The second work, *East Indian Voyage*, published in 1676 by Wouter Schouten, a surgeon of Dutch East India Company who accompanied the Cochin expedition of 1671–1672, is probably the first account we have from the pen of a Dutch surgeon in India until other earlier reports and accounts are traced in the archives at The Hague.

Hendrik Adrian Van Rheede of Drakestein is the author of a monumental work, *Hortus Malabaricus* or Botany of Malabar in twelve folio volumes, with 794 illustrations. He was born about 1637, came out in the military service of the Dutch East India Company, and was supernumerary captain at the siege of Cochin in 1663. He distinguished himself during the siege, and after the capture of Cochin was sent to work as superintendent of the topasses (half-castes) whom the Portuguese had left there. He was a very popular and efficient officer and in 1670 was appointed as commander of Cochin. He improved and enlarged its fortifications, spending considerable sums thereon. It was probably during these years that he had time to study and collect a large amount of information with the help of the natives and the Portuguese. One of the preachers of Cochin, Rev. Casearius, assisted Van Rheede in turning the *Hortus Malabaricus* into Latin.

In 1677, he was promoted to extraordinary member of the Batavia Council. He remained in Batavia for a few months longer and then obtained leave and started home to his fatherland as the Vice-Admiral of the Return Fleet in November of the same year.

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The *Hortus Indicus Malabaricus* began to appear in 1678, when Rheede was able to spend some of his leisure arranging the botanical notes he had collected in India. In the preparation of this work for publication, he received assistance from the scientists and medical men of Holland.

Dedicating a volume to the Rajah of Cochin, Rheede remarks that while he was at his work of collecting, portraying, and describing the plants of Malabar, he had ever before his mind the picture of the Prince who had vouchsafed him such valuable assistance in the matter.

The title-page indicates that Professor Johannes Munnicks, M.D., of the faculty of anatomy and botany, was joint-author of one volume and that Abrahamus Appoot, M.D., added notes, commentary, and illustrations to another. The book was published in Amsterdam.

Van Rheede was sent out again to the East in 1684, invested with high authority, as Commissary-General, to visit factories in Bengal, Coromandel coast, Malabar, Surat, and Cape, with the special purpose of discovering fraud and abuses and devising means to stop them. He dismissed many officers and sent others home. He was at Negapatam and Bhimlipatam and Masulipatam in 1687 and at Pulicat in 1688. At this time, he transferred the headquarters of the Dutch Government from Publicat to Negapatam and built a magnificent castle at enormous cost.

Rheede died on a voyage from Ceylon to Surat in 1691 and was buried in Surat, where a very fine monument has been built over his tomb. But a still more enduring monument is his scientific memoir, *Hortus Malabaricus.*

"Book of Herbs of Amboina" is another monumental work by a medical doctor of Hanau, George Eberhard Rumphius, known under the name of *Plinius Indicus* (Indian Pliny) and a member of the illustrious Academy of Natural Sciences of the Dutch Realm. The book describes accurately the best-known trees, fruits, land and water plants, and herbs which are used by people of Amboina and the surrounding islands, their different names, their cultivation, and their uses and virtues. It also includes several genera of insects and animals. It contains many illustrations and is divided into twelve books. Volume I contains a dedication addressed to the noble, magnanimous, generous, and wise gentlemen of the Society of Netherlands East India Company and signed by Rumphius in his sixty-third year at Castle Victoria, Amboina on 20 September 1690. Volume III contains a preface by the author written in Amboina in 1695.

From the prefaces to the various volumes, we learn that the author lived in Amboina for forty-two years, sometimes as a merchant and sometimes a councillor, and that he was without the use of his eyes for twenty-five years. Though he was very blind, his mind was very acute and active. He was of German origin but domiciled in and devoted to the Netherlands. This book was his life work. It includes some unknown plants of other countries and plants with excellent cura-

tive properties which were brought from India to Amboin[illegible]e author mentions that he took some of his information from a book called [illegible]ctarium." Does he allude to "Ashtanga Hridayam"?

The book was not printed for another half century till [illegible]nnes Burmanus, a medical doctor and a professor of botany in the Medical Garden or Herbarium of Amsterdam, happened to visit Amboina and brought these precious volumes to light. Burmanus returned from the East Indies with the manuscripts and collections of Rumphius. He elaborated and edited the work of the author, adding his own nomenclatures and notes, as well as many illustrations in black and white. Burmanus also wrote a short essay on the benefits of useful plants and an introduction, dated October 1740, for the benefit of the reader. The book was printed and published in Amsterdam in 1747. It contains a portrait of the author at the age of sixty-eight by his son P. A. Rumphius, and also a portrait of Joannes Burmanus.

Vizagapatam, India D. V. S. Reddy

Chair in the History of Medicine Established at Yale University

When Dr. Harvey Cushing bequeathed his collections in the history of medicine and science to Yale University in 1939 to form the nucleus of what is now known as the Historical Library, it was his hope that a chair, and possibly a department, in the history of medicine would ultimately materialize to ensure active and continuing use of his books for the benefit of students of medicine not only at Yale but in a far wider sphere.

Readers of the *Journal* everywhere will be happy to learn that Yale University has now been able to bring this dream of Dr. Cushing's to fruition and that Dr. John F. Fulton has accepted the first Sterling Professorship of the History of Medicine, having resigned from his Sterling Professorship in Physiology on 1 February 1951 to take up the responsibilities of his new post. It will be a source of encouragement and inspiration to everyone in the field of the history of medicine and science that Yale in these troubled times has had the foresight and the courage thus to strengthen the link between the humanities and the sciences. It is particularly heartening that Dr. Fulton, who has already contributed so much to this field, has elected to devote his full time to the history of medicine at the height of his productive career. Dr. Fulton hopes gradually to build up a small Department of the History of Medicine in the Historical Library, strengthening it as funds are available.

The Editors of the *Journal* take this opportunity to offer warm congratulations to Dr. Fulton and to Yale, and they look forward with enthusiasm to the increased activity which this development at one of our great universities will undoubtedly stimulate.

Unique Medical Library Donated to Upsala University

One of the world's finest private collections of books on medical history, the library of Dr. Erik Waller of Stockholm, has recently been placed at the disposal of the Library of Upsala University. It will soon be shipped there, to be kept as a separate unit for the promotion of medical research in Sweden. The collection, long internationally famous, is comprised of over 20,000 volumes and about 5,000 dissertations, and contains 150 incunabula.

Dr. Waller, who recently celebrated his seventy-fifth anniversary, started his collection forty years ago, his principal interest being old manuscripts, of which there are over fifty dating from the thirteenth century. Later, he concentrated on building up a representative collection of works by the great masters of surgery and medicine. Among the many, almost priceless, volumes is the only known copy of Andreas Vesalius' medical thesis, published in 1537, several rare books by William Harvey, discoverer of the circulation of the blood, and a complete set of works by and about Ambroise Paré, "the father of surgery." Dr. Waller's library also contains the first medical book printed in Sweden—on pestilence—written by Lemnius, physician to King Erik XIV, in the sixteenth century, and a large collection of works of the great Swedish naturalist of the eighteenth century, Linnaeus.

Lectures on the History of Medicine at the University of Manchester

As reported in the *British Medical Journal* of November 18, 1950, it has been decided to initiate a series of lectures in the history of medicine at the University of Manchester. From time to time the Medical Faculty has been stimulated to do so by requests from students, and the Faculty has long desired to encourage and foster such interest among the students. This desire, however, was to some extent in conflict with a strong reluctance to add anything to the already overloaded medical curriculum. Now, however, it is proposed that four or five lectures be given each semester, some by members of the University faculty, others by distinguished visitors.

The lectures are not compulsory, and students from all years may attend. Each lecturer is invited to speak on some field or aspect of medical history of particular interest to him. Thus no attempt is being made to give a comprehensive course in medical history. It is felt that during the six years of medical study students will be able to hear lectures on many phases of the history of medicine and those who are attracted by the subject will be stimulated to pursue it further by themselves.

The inaugural lecture was given by Dr. Charles Singer, his subject being "Leonardo da Vinci as Anatomist, Physiologist, and Man of Science." Other lecturers include Dr. William Brockbank, Mr. Geoffrey Keynes, and Sir Geoffrey Jefferson.

Brasavola's "Examination of Medicinal Simples," Rome, 1636

It will interest readers of the *Journal* to learn that a copy of Brasavola's ***Examination*** recently described by Denis Duveen (***J. Hist. Med.***, 1950, **5**, 448) is accessible to the public in the Wellcome Historical Medical Library. This copy has the same collation as Mr. Duveen's, but measures 22.5 by 30 cm. Purchased in France in 1928, it was catalogued in 1930 and has thus been available for inspection for the past twenty years. It is to be regretted that doubts of its existence have found their way into print, and it once more emphasizes the fact that the moment one is tempted to label a book unique he should immediately begin to distrust the statement and search carefully to prove or disprove it, at least to the extent of examining the collections that are known to be particularly rich in holdings of a similar nature.

W. J. BISHOP, *Librarian*
The Wellcome Historical Medical Library

Book Reviews

RUDOLF MAGNUS. *Goethe as a Scientist.* Foreword by Günther Schmid. Translated by Heinz Norden. (The Life of Science Library.) New York, Henry Schuman, 1949. xix + 259 pp. $3.50.

AT the University of Heidelberg in the summer semester of 1906 a professor of pharmacology delivered a series of ten lectures on *Goethe als Naturforscher*. He was a distinguished scientist soon to be called to the Netherlands as a full professor and director of the world famous Institute of Pharmacology at Utrecht. These lectures, published in the same year they were delivered, awakened the interest of many of his fellow scientists in the scientific work of Germany's greatest poet and they have been quite generally acclaimed as the best general treatment of the subject. Unfortunately, this has been a rare book for decades in this country and Mr. Schuman is to be congratulated for making it available as one of the volumes in the Life of Science Library. Friends of the original German edition are not likely to miss the few minor deletions (Magnus' foreword, a dozen indifferent illustrations, salutations, and other relics of the lecture format); on the other hand they are likely to approve of Mr. Norden's clear, direct translation and the new foreword and supplementary bibliographical items by the late Professor Günther Schmid of Martin-Luther University, Halle-Wittenberg in Germany.

To students of the history of science and to Goethe enthusiasts who have not perused his extensive scientific work (14 volumes in the monumental Weimar edition) this book should come as a delightful surprise. One who has heretofore read only the perfunctory and patronizing accounts so often given in scientific histories may well have concluded that, aside from a few vague generalizations, Goethe's scientific work hardly merits the attention bestowed upon him because of his fame as a poet. For such a misconception Professor Magnus provides a stimulating antidote. He reveals Goethe as an enthusiastic and, remembering his time and circumstances, profound scientific investigator. Goethe abhorred dilettantism, and in his own work and thought insisted upon thorough first-hand observation and experimentation—his detailed records and sketches, his equipment, wide correspondence, and publications abundantly testify to this. Magnus devotes four of his lectures to Goethe's biological work, emphasizing the significance of his *Urpflanze* in botany and his stimulating, if sometimes misapplied, concept of serial homology in zoology. His two lectures on Goethe's color theory demonstrate their fundamental value in the history of physiological optics. Goethe's contributions to mineralogy, meteorology, and geology were regarded by Magnus as less significant and less interesting and are therefore summarized in one lecture.

To the reader who is not a Goethe enthusiast and who may perhaps be dubious about the great German poet's real contributions to science, this book should bring both confirmation and surprise. While Goethe is clearly treated as a noteworthy figure in the history of science, this is by no means one of those unrestrained and uncritical panegyrics of hero-worship so often lavished on such universal geniuses as Leonardo, Pico, Swedenborg, and Goethe. Magnus himself frankly recounts his hero's foibles and shortcomings, as for example the fundamental physical errors in his *Farbenlehre* and the ignoble anti-Newtonian outbursts. In this regard the excellent critical foreword by Professor Schmid is especially valuable. It is heartening to receive from a famous German scholar such a candid summary of the extravagant claims commonly made for Goethe as a predecessor of Darwin. Citing with approval the studies of Viktor Franz, he sets down this concise verdict—"Goethe lagged behind his contemporaries in faith and zeal as to the idea of evolution. He made no direct research contribution in this direction. He never fully grasped the notion of evolution—in the beginning, perhaps, did not want to grasp it. He never championed it and his remarks permitting an evolutionary inference are but scattered and casual. True, his study of the intermaxillary bone and his original approach to the problem of plant form were such as to lend themselves to later scientists in their own evolutionary thinking. But Goethe's contributions in this field remain slight compared to the vastly more significant work dating from Erasmus Darwin and Lamarck, Goethe's contemporaries."

On the whole, readers are likely to agree that Magnus' lectures deserve their good reputation and that Professor Schmid has made a valuable contribution of more recent scholarship. It must be remembered, however, that these were university lectures and that this small book is not an exhaustive, definitive work on the scientific aspect of Goethe's genius. Such a work has not yet appeared. When and if such a work does appear, one could hope that beside cataloguing the full range of his scientific work in detail and picking the inevitable bone of priority, it will consider the basic philosophical issues involved. Magnus has clearly made the point, summarized thus by Schmid: "Only when Goethe the scientist is fully comprehended do we get a true picture of Goethe the creative poet." The work we would look for would emphasize the reverse of that statement. Clearly Goethe accomplished an immense amount of detailed analytical scientific observation and experimentation, and he was a pioneer and first discoverer in a number of cases, but his rare genius as a scientist was as a generalizer and synthesizer, and his high value for us lies rather in this essentially poetic realm of synthesis. Certainly it is only when Goethe the poet is fully comprehended that we get a true picture of Goethe the creative scientist.

Cambridge, Massachusetts G. E. ERIKSON

I. Bernard Cohen. *Some Early Tools of American Science. An Account of the Early Scientific Instruments and Mineralogical and Biological Collections in Harvard University*. With a foreword by S. E. Morison. Cambridge, Mass., Harvard University Press, 1950. xxi + 201 pp. $4.75.

Spread over the buildings of some of our older colleges, stowed away in cabinets or in attics, are examples of the old "philosophical apparatus" with which the savants of the eighteenth and early nineteenth century used to conduct their experiments in mechanics, electricity, pneumatics, astronomy, or microscopy. This material is valuable for an understanding of the development of science, some of it also from the point of view of craftsmanship. It pays to collect and preserve this material, and to use it, not only as exhibition curiosa, but as an integral part of our scientific heritage.

Professor Cohen, assisted by Mr. David P. Wheatland, has been engaged in recovering this philosophical apparatus from the nooks and corners of Harvard University in preparation for an exhibit in the main lobby of the Chemical Laboratory on Oxford Street, Cambridge. The venture into detective work proved to be exceedingly profitable, and this book gives an adequate description of the material collected. The exhibition comprises a select number of Harvard's scientific tools from 1764—the year of the fire in which almost all of the then existing apparatus was destroyed—until about 1825. There are instruments for use in astronomy and physics, with some microscopes and mineralogical specimens, all from the eighteenth century; there is also chemical equipment, which dates from the early years of the nineteenth century.

This book is, however, not in the first place of importance because of its descriptions and its photographs of the philosophical apparatus. It is really a history of science at Harvard; 130 out of the 201 pages of the book are devoted to a critical account of the teaching in physics, astronomy, chemistry, mineralogy, and the biological sciences during the period ending around 1825. It shows how much interest was devoted at Colonial and Early Republican Harvard to the natural sciences, and dispels the notion that Harvard at that period was only interested in theology and the classics despite its control by the clergy.

Dr. Cohen's work is therefore a new contribution to the growing literature on early American science and enables us to come to a better understanding of the rôle of science in the formative period of the Republic. It is quite thorough, and leads us through a detailed description and history of the scientific instruments at Harvard before and after the fire of 1764 to the beginnings of chemistry at the College (with Morton's *Compendium physicæ* introduced in 1687) and the early courses in the biological sciences (beginning with Waterhouse in 1788). There is also a history of the early mineral cabinet and of other museum collections.

No great discoveries or scientific theories are connected with this period at

Harvard, as little as with any other American college of the same period unless we associate Franklin with the University of Pennsylvania. But this book is important for a different reason—for the search of the roots of scientific interest, its relations to the community, its impact on the thoughts of the period, and the measure of its recognition as a cultural asset. This field is still comparatively new, and deserves the concerted efforts of historians, economists, and scientists. Dr. Cohen has shown how even the relatively arid field of Colonial science offers points of striking interest.

Many beautiful illustrations, with carefully presented historical comment, add to the attractiveness of this book. Of particular interest are the telescopes, the orreries, and the microscope, with "Professor Peck's Fish" hardly showing the wear of its one hundred and fifty years of happy survival.

Cambridge, Massachusetts DIRK J. STRUIK

GEOFFREY KEYNES. *The Personality of William Harvey*. Cambridge, at the University Press, 1949. 48 pp., 8 portraits. $1.00.

MR. GEOFFREY KEYNES is already well known in connection with William Harvey on account of his authoritative bibliography of Harvey's works published in 1928. His Thomas Vicary Lecture for 1948 before the Royal College of Surgeons was on *The Portraiture of William Harvey,* and now appears his little book, *The Personality of William Harvey,* which was the subject of his Linacre Lecture at St. John's College, Cambridge in May 1949. Let us be thankful for these ancient foundations.

Mr. Keynes has wisely resisted the temptation to discuss Harvey's scientific work which has been described many times, but he tells us of his rather rapid advance in the profession after his return from Padua (where he graduated Doctor of Physic in 1602), of his connection with St. Bartholomew's Hospital, and of his practice in London where some very eminent persons consulted him as their physician. Indeed, he was appointed Physician Extraordinary to King James and, in 1631, Physician to Charles I. Mr. Keynes relates how Harvey in 1616 became Lumleian Lecturer in the Royal College of Physicians, a position which he held until 1656. The precious lecture notes, which contain his first description of the circulation of the blood, are preserved in the British Museum and were published in facsimile in 1886 under the title *Prelectiones anatomiæ universalis* with a transliteration by a committee of the Royal College of Physicians. Mr. Keynes tells how Harvey proposed to make his anatomical demonstrations, but not how these notes, full of abbreviations and written in a most crabbed hand, reveal the way Harvey looked on things. He was a most amusing lecturer and employed picturesque and homely figures of speech, and perhaps Mr. Keynes might have

made more use of these lectures than he has done. And there are other lecture notes in the British Museum (Sloane Mss. 486) which some day I hope will be published by a clever decipherer. Photographs of these are in the Library of the New York Academy of Medicine.

Harvey attained to high positions in the Royal College of Physicians and was its very generous benefactor, giving the building and also the books for its library by the terms of his will. The College chose him as their President in 1654 but he felt he had to decline as he was old and in poor health.

Anyone who writes about Harvey must rely a good deal upon the stories of John Aubrey who laid stress upon some of his little eccentricities, his liveliness, and his rather quick temper. The author of this present book has not accepted all of Aubrey's anecdotes. I have thought for years that more might be learnt of Harvey as seen through the eyes of others if only we could find some allusions to him written by those who lived on the Continent when he went abroad in 1629 or 1630 for a three-year journey with the Duke of Lennox. Harvey's rare letter from France to Viscount Dorchester with a lively account of what he saw and was doing is in the Bodleian Library.

The most important part of this book, to our mind, is Mr. Keynes' description of his discovery of a portrait of William Harvey in a "derelict house, Rolls Park, near Chigwell in Essex, about fifteen miles east of London." It shows him at about the age of forty-five. To date the best known portrait has been at the Royal College of Physicians and was painted when he was about seventy-eight. The newly found portrait is now housed at the National Portrait Gallery.

As is to be expected, this modest little book is delightfully printed by the Cambridge University Press. All students should welcome this addition to accounts of one of the greatest of our medical heroes.

White Plains, New York ARCHIBALD MALLOCH

Huang Ti. Nei Ching Su Wên. The Yellow Emperor's Classic of Internal Medicine. Chapters 1–34 translated from the Chinese with an introductory study by Ilza Veith. Baltimore, The Williams and Wilkins Company, 1949. xix + 253 pp. $5.00.

THIS important document of medical history should have been put into English long ago. "No major part of it has ever before appeared in any Western language. Yet the book constitutes the basis of Chinese and Japanese orthodox medicine." Throughout the Far East it is regarded as the most influential medical work in existence. Little wonder that it has been accorded first place in the Ssu-k'u Ch'üan-shu, a collection from every sphere of life and philosophy of the most eminent works in Chinese literature. We cannot be too grateful to Dr. H. E.

Sigerist for taking over the work commenced years ago in Baltimore by Mr. J. W. Lindau, and putting it into the hands of Ilza Veith, who worked over it for years and presented it for her doctor's degree at Johns Hopkins University in 1947.

As we read through this learned work, we ask with Dr. T. Nakayama, the learned Japanese Oriental scholar, "Is it possible to consider ancient Chinese medicine as a real science? To the moderns there seems nothing scientific about it. On the contrary, it is covered with a pre-historic mystic patina, and sometimes appears to be scarcely comprehensible." Yet, because of its great therapeutic efficacy, its values become evident. But we must bear in mind that the devotion of all Chinese was to internal medicine, scarcely ever to surgery. "The Confucian tenets of the sacredness of the body counteracted any tendency towards the development of anatomical studies and the practice of surgery." A religious stigma became attached to the practice of surgery, so that the social position accorded to the surgeon fell constantly lower. It is this that has opened the door for Western practice, surgery of the modern type being the lever with which Chinese conservatism was forced open.

There were three features that emerged in the history of Chinese medicine long before formalized cults were developed. These features were the concepts of (i) Tao, (ii) Yin and Yang, and (iii) the theory of the elements and a system of numbers. Tao, the Way, was subdivided into the Tao of Heaven, the Tao of the Earth, and the Tao of Man, all three being regarded as an indivisible entity. Early Chinese medical thought was inextricably linked with philosophical concepts. The reader of the *Nei Ching* finds numerous references that remind him that health, and with it the desirable state of longevity, depend largely on his own behavior towards Tao. "Longevity itself became to a certain degree a token of sainthood, since it was an indication that it had been achieved by the personal effort of complete adherence to Tao." In the very first chapter of the *Nei Ching* we read: Those who follow Tao achieve the formula of perpetual youth and maintain a youthful body. It is as if we were given a glimpse, millenniums ago, of the coming of psychosomatic medicine.

Our first question, as we consider Chinese medicine, is "What was the old Chinese conception of the nature of disease?" We read that the Yellow Emperor once remarked: "In ancient times the people lived to be over a hundred years, yet remained active and did not become decrepit. But nowadays people reach only half of that age, and become decrepit and failing. Is mankind becoming negligent of the laws of nature?" The answer given was that in ancient times people who understood Tao patterned themselves upon the Yin and the Yang, the two principles of nature, living in harmony with the arts of divination. They kept their bodies united with their souls and fulfilled their allotted span completely. "Nowadays people are not like this. They do not know how to find contentment within themselves and are not skilled in the control of their spirits."

Our second question is as to the nature of diagnosis, and we discover that

the physician was not only cautioned to prevent relapses, but became aware "that the greatest medical art was the diagnosis of a disease at the stage of its inception. The superior physician helps before the early budding of the disease. The inferior physician begins to help when the disease has already developed; he helps when destruction has already set in. And, continuing, "It is imperative that the physician's own health and respiration be in perfect order. Those who are habitually without disease help to train and to adjust those who are sick, for those who treat should be free from illness. In order to train the patient to adjust his breathing, they act as examples."

Our third question deals with treatment. There are five methods of treatment listed. The first cures the spirit; the second gives knowledge on how to nourish the body; the third teaches the true effect of medicines; the fourth explains acupuncture; the fifth gives instruction on how to examine and treat the bowels and the viscera, the blood, and the breath. It is striking to note that the first method, the cure of the spirit, illustrates the closeness between Chinese religious and medical thinking. The treatment of the spirit consisted in guiding towards Tao those who had infringed the basic rules of the universe, severing their own roots and ruining their true selves. It was said of old: "Those who disobey the laws of Heaven and Earth have a lifetime of calamities, while those who follow the laws remain free from dangerous illness." Such following meant "a modest and retiring way of life, the avoidance of excesses, and in being an example to others in one's true devotion."

Emphasis on preventive medicine is taught in one of the most memorable passages of the whole classic: The sages did not treat those who were already ill; they instructed those who were not yet ill. To administer medicines to diseases which have already developed and to suppress revolts which have already developed is comparable to the behavior of those persons who begin to dig a well after they have become thirsty, and of those who begin to cast weapons after they have already engaged in battle. Would these actions not be too late?

Fully to understand Chinese medicine as outlined in this great classic requires a fathoming of its philosophical foundations. On one occasion the Yellow Emperor said: "Life itself is really the beginning of illness. Minute particles first enter the body through the skin, and all physicians of skillful workmanship, those who are renowned, call this group 'stubborn diseases' . . . good physicians all have developed a definite method; they guard the fate of the parents, of kin, of brother, of strangers, and of close friends."

It is no easy task to which Ilza Veith has challenged us. We may well be grateful to her for becoming so much of a Chinese scholar as to bring us this translation, which is bound to be an essential introduction for all who wish to penetrate the mysteries of Chinese medicine.

New York City EDWARD H. HUME

LOUIS JACOBSON. *Ouvrages sur l'organe voméro-nasal,* avec préface et notes par O. C. Hallnagel-Jensen et Erik Andreasen. Copenhagen, Einar Munksgaard, 1950. xxix + 175 pp.

JACOBSON's organ is a small cartilaginous embryological rudiment situated on the cartilaginous septum of the nose just above the anterior nasal spine. It is of no known significance in man, but in lower vertebrates is closely associated with the olfactory function. This structure is named after Ludvig Jacobson, a Danish physician and anatomist.

Jacobson was born in Copenhagen in 1783. He took his medico-surgical degree at the Chirurgisk Academie of his native city in 1804. Three years later he was appointed lecturer in chemistry at the Academy and he also lectured at the Royal Veterinary School at Copenhagen. Encouraged by Professor Viborg, the director of the Veterinary School, Jacobson pursued anatomical studies. It was at this time that he made his first anatomical discovery, the "hitherto unknown secretory organ in the nose," which has since been named after him as *organon vomeronasale Jacobsoni.* This discovery was placed before the Academy of Science of Copenhagen in 1811 by Jacobson's chief, Professor Viborg. Subsequently, he was granted a pension for a two-year period of study abroad, and set out via Kiel and Göttingen for Paris. From Germany, he sent a communication to the Royal Veterinary Society on the vomero-nasal organ in domestic animals. This paper was published in 1813 in the annals of the Academy. After arriving in Paris, Jacobson, with the assistance of Georges Cuvier, the comparative anatomist, presented to the Institut de France a paper entitled *Description anatomique d' un organe observé dans les mammifères.* This communication was favorably reported by Cuvier, Lacépède, and Tenon and the report appeared in volume 18 of the *Annales du muséum d' histoire naturelle.* Jacobson's paper was never published, but the report of the Institut committee called the attention of the scientific world to his discovery.

After his return to Denmark, Jacobson established himself as a physician and surgeon with a good practice. However, he continued his anatomical studies and enjoyed an excellent reputation. He died in 1843 of typhoid fever.

In the publication under review, Hollnagel-Jensen and Andreasen have collected all of Jacobson's writings on the vomero-nasal organ. Of considerable interest is the facsimile reproduction of his first communication to the Danish Academy of Science, which was discovered in the library of the Royal Danish Veterinary and Agricultural School in an old copy book. The volume is beautifully printed and is a splendid contribution to the history of medicine.

GEORGE ROSEN

EDWARD H. HUME. *Doctors Courageous.* New York, Harper and Brothers, 1950. xiv + 287 pp., 23 illus. $3.50.

FROM his lifelong contact with the mission field, Dr. Hume tells popular "stories

of great doctors who have brought healing and light to the peoples of Africa and Asia." In a series of nineteen essays he portrays some of the problems, methods, and accomplishments of medical missionaries of the past century and especially of the last fifty years.

The volume is divided into four sections dealing respectively with Africa, India and Pakistan, the Near and Middle East, and China. Many of the sketches deal with more than one individual, portraying the work of the pioneer and also of those who have picked up and carried on the tasks to their ultimate fruition. In a certain sense each chapter represents a special type of medical program. Dr. Hume sketches the problems that stirred the imagination and challenged the vision of the missionary, and then proceeds to show how the missionary through his medical activities was able to provide at least some partial solution to the problems. Special emphasis is laid on social problems allied with the economy and mores of the people.

This is not a volume of medical history or biography. The sketches are all too inadequate to give a proper historical account of many of the persons described. Only a few high points of the individual's life are recounted and not always in strictly chronological sequence. The factual material is used as a canvas on which to portray the spirit and zeal that motivated these missionaries. The reader is given an insight into the character of these pioneers and of their devotion to a people, to a cause, and to their God.

The story is told with a missionary zeal that all too frequently is punctuated with an element of preaching. From his background in this field the author misses few chances to teach a spiritual lesson when telling the stories of the accomplishments and disappointments of his colleagues. As a popular account of the medical mission field, the book is excellent; such is its real aim. As a contribution to medical history its chief value lies in the accounts, not of the notable pioneers such as Livingstone, but a large number of little known persons who have left an indelible imprint on the countries and the people with whom they have so generously shared their lives.

University of Minnesota GAYLORD W. ANDERSON

ADOLF MEYER-ABICH, Ed. ***Biologie der Goethezeit.*** Stuttgart, Hippokrates Verlag Marquardt; Waltham, Mass., The Chronica Botanica Co., 1949. 302 pp., illus. $5.50.

ERNST GRÜNTHAL and FRITZ STRAUSS. ***Abhandlungen zu Goethes Naturwissenschaft*** (Berner Beiträge zur Geschichte der Medizin und der Naturwissenschaften Nr. 10), Bern, Paul Haupt, 1949. 115 pp., illus. Sw. Fr. 8.50.

THE first of the two volumes under review here is an anthology containing excerpts from Goethe's morphological works and from the biological writings of six contemporaries: Georg Forster, Alexander von Humboldt, Lorenz Oken,

Carl Gustav Carus, Karl Ernst von Baer, and Johannes Müller. Dr. Meyer-Abich, the editor, introduces the volume with a historical discussion of the two polar types of scientific methodology, that of the Greeks which was static and qualitative and that of the Renaissance which was dynamic and quantitative. The purpose of this analysis is to show that Goethe represented the Greek approach with its love of completeness and wholeness. This enables the editor to present his own philosophy of holism and organicism in conjunction with Goethe's view. The selections from the other writers likewise support this point of view. Of greatest interest, however, are the selections from the six contemporaries of Goethe.

The volume of Grünthal and Strauss comprises five essays on various aspects of Goethe's scientific work. Grünthal discusses the historical roots of Goethe's scientific thought, his maxims and reflections on science, Goethe's study of cerebral anatomy, and the relation between Goethe's poem *Dauer im Wechsel* and J. C. Reil's *Rhapsodien über die Anwendung der psychischen Kurmethode auf Geisteszerrüttungen*. Strauss deals with Goethe's morphological researches.

Both volumes are interesting reading and leave one with renewed respect for Goethe the scientist. His fame as a literary genius so overshadows all other aspects of his work that it must be stated repeatedly that he was no mere dabbler in science. Both these works contribute therefore to an understanding of an exceptional personality.

GEORGE ROSEN

EARL W. COUNT, Ed. *This is Race. An Anthology Selected from the International Literature on the Races of Man*. New York, Henry Schuman, 1950. xxvii + 747 pp. $7.50.

"RACE" in recent times has become through much abuse one of those portmanteau words that are all things to all men. Yet this need not be so, for race as a concept, as an idea, has a definite meaning and application. To show what that is, is the purpose of this anthology. Dr. Count has gathered sixty selections, ranging in time from the eighteenth century to the present day. More than half of them cover the present century since the First World War. From a geographical viewpoint the editor has also ranged widely. In addition to American and English authors, there are contributions from German, Italian, Polish, Russian, French, and Swedish scientists.

This book is essentially about the scientific concept of race, that is, physical race. In addition, it undertakes to trace the history of the race concept from the philosophical anthropology of Kant to the scientific approach of the present day. Dr. Count shows that the word race has two scientific uses: one defining a major group of all mankind, the other referring to a certain physical type within one of these groups, and that these run side by side.

All in all, this is an excellent collection of materials on race, and would undoubtedly be useful to teachers of biology or anthropology. But its appeal is much wider for it will clearly be of interest to the educated layman.

GEORGE ROSEN

LIONEL CHALMERS. *An Account of the Weather and Diseases of South Carolina.* London, Edward and Charles Dilly, 1776. 2 vols. Facsimile ed. with Preface by Joseph Ioor Waring. [Richmond, Virginia, Whittet & Shepperson, 1948.]

THIS very handsome little pamphlet, issued by Mead Johnson and Company, consists of a photoreproduction of pages 57–98 of volume 1, and pages 69–80, 161–170 of volume 2 of the famous American medical classic, and a short but substantial introduction by Dr. Joseph Ioor Waring of Charleston. Following the interests of the sponsor, only such passages as deal with children's diseases (summer diarrhea, worms, convulsions, thrush, pneumonia, whooping cough) have been selected and reproduced. Chalmers, a Scot, was, like other pediatric writers of his period, strongly influenced by iatrochemical ideas that he combines in his second volume with some elements of Brunonianism. His approach is full of good sense, and at the level of the best contemporary work. The many who are not privileged to possess the whole book of Chalmers will enjoy owning at least this delightful and instructive sample.

Madison, Wisconsin ERWIN H. ACKERKNECHT

LEONARD ROGERS. *Happy Toil. Fifty-five Years of Tropical Medicine.* London, Frederick Muller, Ltd., 1950. xvi + 271 pp., illus. 18s.

STEPHEN TAYLOR and PHYLLIS GADSDEN. *Shadows in the Sun.* London, George G. Harrap & Co., Ltd. (Distributed by the British Book Center, Inc., New York), 1949. 187 pp. 15s.

IN the autobiography of Sir Leonard Rogers it is our good fortune to have the story of a physician who stands in the line of such great figures as Patrick Manson, Ronald Ross, and David Bruce. It is an intimate account of the career and achievements of a remarkable man. During his twenty-seven years of work in the Indian Medical Service, Sir Leonard brought about a veritable revolution in the fight against tropical diseases. He discusses his research into the causes and treatment of kala-azar, amoebic dysentery, cholera, leprosy, snake poisoning, as well as his efforts to forecast epidemics. In addition, Rogers tells about the origin of the famous Calcutta School of Tropical Medicine which he founded. After his retirement he also organized the British Empire Leprosy Relief Association. In fact, it is his work on leprosy above all else that has earned for Sir

Leonard Rogers his chief claim to fame. He can truly be said to be the man who brought hope to the leper.

Rogers' autobiography is a valuable contribution to the history of tropical medicine. But it will also appeal to a wide audience because of the simplicity and sincerity with which the author tells his story.

The good that men do is not lost. The work of Sir Leonard Rogers, for example, is clearly reflected in the other volume under review here. This is a volume of contemporary medical history concerned with the fight against tropical diseases in the diverse territories of the British Colonial Empire. It tells the story of the doctors, nurses, entomologists, and engineers, many of whom have given their lives to eliminate or to reduce the causes of disease and death in the tropics. From Makogai in the western Pacific where leprosy is brought under control, the authors go on to tell about malaria in Ceylon, yaws in the West Indies, scrub typhus, yellow fever research in Uganda, hookworm in Trinidad, health and disease in Cyprus, and sleeping sickness in British Africa. Dr. Taylor and Miss Gadsden tell their story simply and well. The book is copiously illustrated with photographs and twenty-six charts in color. There is an index.

This book records ongoing achievement, but its authors are not unaware of the large task still ahead. It is recommended to all, for in terms of health there can be only one world.

GEORGE ROSEN

WOLFRAM EBERHARD. *Chinas Geschichte.* Bern, A. Francke, 1948. 404 pp., 31 illus. Sw. Fr. 22.50 (cloth); Sw. Fr. 18.00 (wrappers).

AN indispensable prerequisite for an understanding of the history of Chinese medicine is an awareness of the development of Chinese civilization. There are not many good introductory accounts in this field, so that we welcome Eberhard's history of China with considerable pleasure. The story is covered from prehistoric times to the end of World War II. Politics, economics, science, literature, and art are all interwoven to produce a coherent and meaningful picture of the Chinese past. Among one-volume histories, this is one of the most useful, and it is recommended to all who are interested in Chinese civilization. There is a selected and annotated bibliography which takes account of recent literature, as well as a detailed index.

GEORGE ROSEN

PATRICE BOUSSEL. *Histoire Illustrée de la Pharmacie.* Préface de Ch. Bedel, Professeur d'Histoire de la Pharmacie à la Faculté de Paris. Paris, Guy Le Prat, 1949. 300 pp., 235 illus. Frs. 2,600.

AN imposing volume of 28.7 by 21.5 centimeters, beautifully printed on choice paper and abounding in excellently reproduced illustrations (several in full color

and some covering whole pages), lies before the reviewer. It undoubtedly offers most enjoyable proof of the fact that the postwar depression in France is a matter of the past, and it is very likely that there will be a demand for so attractive a publication outside the pharmaceutical field as well as within it. This is all the more reason therefore for the reviewer to give it careful and critical attention.

The author, Librarian at the Bibliothèque Historique of the city of Paris, has succeeded in assembling a wealth of pictorial material and in presenting it charmingly and adequately. He has not succeeded as well in presenting the text material that he has gathered. This history, therefore, lacks the proper balance, and the selection and evaluation of men and events are rather arbitrary.

It is understood that the book is intended not to add to our knowledge of pharmaceutical history but to popularize it. Hence one can only regret that there are no indices, no references to sources (except a general acknowledgment of indebtedness to the meritorious historian of pharmacy, Maurice Bouvet), and no bibliography. There are, however, commissions and omissions which even in a popular text should and could be avoided. In the following a random list of such deficiencies has been given.

Since the existence of a pharmaceutical shop in Arles at the end of the twelfth century is mentioned (p. 78), one misses a note concerning the *statuta sive leges municipales Arelates,* promulgated between 1162 and 1202, hence preceding the law of Frederick II, Emperor of Germany and King of the Two Sicilies, legally separating the professions of pharmacy and medicine. As to the latter law, historians generally agree that it was issued during the final phase in the promulgation of hygienic legislation in the Two Sicilies, hence in 1240 and not in 1220.

The statement that "en 641 la bibliothèque d'Alexandrie n'est plus" (p. 64) seems to support the old legend of the destruction of this famous library by the Arabian conquerors of Alexandria. It is a recognized fact that this destruction had happened earlier and had been the work of fanatic Christians.

Among the early "formulaires officiels" (pp. 91, 92) one misses the first European representative, the Florentine *Nuovo Receptario* of 1498. The first edition of the *Dispensatorium pharmacopolarum . . . authore Valerio Cordo* was issued in Nuremberg in 1546 and not, a rather common mistake, in 1535 (p. 91). The author lists among the important pharmaceutical literature of the sixteenth century Jacques du Bois' (called Sylvius) *Methodus medicamenta componendi ex simplicibus* and *De medicamentorum simplicium præparatione delectu.* It might be added that there appeared in 1548 in Lyon a book entitled *Pharmacopœæ, Jacobi Sylvii Medici, Libri tres . . .*, for the first time introducing the term "pharmacopœ[i]a," for a book of formulas and standards, into pharmaceutical literature.

In his otherwise excellent discussion of the work and personality of Nicolas Lémery (p. 123) the author mentions Lémery's *Cours de Chymie* and *Traité Universel des Drogues Simples.* He forgets entirely Lémery's *Pharmacopée*

Universelle, the first edition of which appeared in 1697 and which, through its very title, pointed to a "universal" unification of formulas and formularies.

The French pharmacist Bayen is credited with the discovery of oxygen "avant Priestley et Scheele" (p. 126). In fact, Bayen reported before the Parisian Academy of Science on a "fluide élastique," escaping when mercuric oxide was heated, in 1774, while Scheele made his discovery before 1773 and Priestley his—like Bayen—in 1774.

Although in a book like this the list of meritorious eighteenth century scientists from the ranks of pharmacy has, of necessity, to be very selective, and people of French origin have to be given preference, the omission of the name of Klaproth, the pharmaceutical discoverer of several elements, among them uranium, certainly leaves a gap. The same can be said of quite a number of other omissions. One looks in vain, for instance, for the name of the German pharmacist-chemist Doebereiner, the discoverer and first user of the principle of catalysis.

The somewhat arbitrary evaluation of merits may be illustrated by the following examples. Stanislas Limousin is listed in recognition of his invention of the "cachets médicaux" (p. 156), a rather trifling improvement in the oral application of drugs. No mention is made of his introduction of the ampule and his invention of the first apparatus for the internal use of oxygen. Of all the discoveries of Vauquelin, only that of chromium and sodium hyposulfite, and of those made by Braconnot that of the "bougies stéariques" have been listed and considered sufficient testimony to the fame of these men (p. 162). As to the greatest French pharmacist of our time, Ernest Fr. A. Fourneau, who died in 1949 after having retired from his position as Director of the Research Laboratories of the Institut Pasteur some years ago, mention has been made only of his work concerning the rôle of para-amino-benzene-sulfonamide in the complex molecule brought on the market under the name Prontosil (pp. 172, 173). His part in the unveiling of the mystery of "Germanin" ("Fourneau 309") and the work on antihistamines as well as his research leading up to the preparation of stovarsol has apparently not been considered as important.

There is, finally, one omission which this reviewer hopes is accidental and not due to chauvinism. On page 164 the author reports on the discovery of morphine as follows: "La morphine, premier alcaloïde connu, fut découvert simultanément, en 1804, par Séguin aidé de Bernard Courtois, et par Derosne. En 1815 seulement son caractère basique était reconnu." There is no mention whatsoever by Boussel of the German pharmacist Sertürner, to whom credit has generally been given, if not for having been the very first to isolate the substance to which he later gave the name morphine then at least for his immediate recognition of the importance of the newly found opium constituent and its basic character.

Unfortunately, the discovery of morphine has been subjected repeatedly to chauvinistic discussions. Even the remarkable fact that the Institut de France

in 1831 (on the basis of the testimony and recommendations of Robiquet and Gay-Lussac, supported by the great naturalist Cuvier) rewarded Sertürner with the "Prix Monthyon" for his discovery of the basic character of morphine, did not put an end to the nationalistic quarrels. The historical facts are, that the product obtained by Derosne (according to his compatriot Robiquet) consisted mainly of narcotine, and that Séguin in a paper read to the Institut de France in 1804 described an extraction method for opium which must surely have yielded morphine without, however, recognizing either the therapeutical importance or the basic nature of the product (the paper remained unpublished, furthermore, until 1814), while Sertürner found the substance, its alkaline character and its sleep-producing quality as early as 1805 and reported on them in 1806. This early publication of the young pharmacist was not very clearly written, and it was not until the appearance of another paper of his, published in 1817 (not 1815), that general attention was given to the discovery of the basic character of morphine (and its analogues). It was the great French chemist Gay-Lussac who, after having read this publication, expressed his amazement about the fact that a discovery of such importance had not found earlier recognition. The attitude of Robiquet, Gay-Lussac, and Cuvier mentioned above sets a shining example, to be pointed to with pride by the French people, for the way in which such cases should be dealt with in the realm of science.

Misprints are comparatively rare in this technically excellent volume. On page 170 read Ladenburg (instead of Landenburg) and on page 171 Knorr (instead of Knor). Dorvault established the Pharmacie Centrale de France in 1852 and not in 1752 (p. 180).

This very French (hence very charming) book proves its national origin by the fact that among the illustrations there are quite a number that certainly deserve the adjective "galant" given to some of them in the respective captions. There are in this book of pictures no portraits of famous French pharmacists with the only exception of that of Parmentier used as a closing vignette at the end of the volume.

Madison, Wisconsin GEORGE URDANG

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